217/782-2113

"REVISED"

TITLE V - CLEAN AIR ACT PERMIT PROGRAM (CAAPP) PERMIT

and

TITLE I PERMIT¹

PERMITTEE

The Gillette Co., North Chicago Manufacturing Center

Attn: Mark Kuklinski, Environmental Health and Safety Specialist

3500 West 16th Street

North Chicago, Illinois 60064

<u>Application No.</u>: 96010012 <u>I.D. No.</u>: 097125AAM

Applicant's Designation: NCMC Date Received: January 5, 1996

Operation of: Bulk Chemical Intermediates Manufacturing

Date Issued: October 2, 2001 Expiration Date²: October 2, 2006

Source Location: 3500 West 16th Street, North Chicago, Lake County

Responsible Official: Vernon Murdock, Plant Manager

This permit is hereby granted to the above-designated Permittee to OPERATE a manufacturing plant of active ingredients for personal care and stationary products, pursuant to the above referenced permit application. This permit is subject to the conditions contained herein.

Revision Date Received: July 29, 2002
Revision Date Issued: April 5, 2004
Purpose of Revision: Minor Modification

This minor modification revises the emission limits in Condition 7.3.6 to allow flexibility for Reactors RX_101, RX_201, and RX_301. In addition, emission factors in Condition 7.3.12 are updated.

This document only contains those portions of the entire CAAPP permit that have been revised as a result of this permitting action. If a conflict exists between this document and previous versions of the CAAPP permit, this document supercedes those terms and conditions of the permit for which the conflict exists. The previous permit issued October 2, 2001 is incorporated herein by reference. Please attach a copy of this amendment and the following revised pages to the front of the most recently issued entire permit.

If you have any questions concerning this permit, please contact Jonathan Sperry at 217/782-2113.

Donald E. Sutton, P.E. Manager, Permit Section Division of Air Pollution Control

DES:JS:psj

cc: Illinois EPA, FOS, Region 1 USEPA

This permit may contain terms and conditions which address the applicability, and compliance if determined applicable, of Title I of the CAA and regulations promulgated thereunder, including 40 CFR 52.21 - federal PSD and 35 IAC Part 203 - Major Stationary Sources Construction and Modification. Any such terms and conditions are identified within this permit.

Except as provided in Condition 8.7 of this permit.

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1.0 SOURCE IDENTIFICATION

1.1 Source

The Gillette Co., North Chicago Manufacturing Center 3500 West 16th Street
North Chicago, Illinois 60064
847/689-3111

I.D. No.: 097125AAM

Standard Industrial Classification: 2844, Perfumes, Cosmetics,

and Toilet Preparation 2899, Chemicals and Chemical

Preparations

2865, Cyclic Crudes and

Intermediates

1.2 Owner/Parent Company

The Gillette Company Prudential Tower Building Boston, MA 02199

1.3 Operator

The Gillette Co., North Chicago Manufacturing Center 3500 West 16th Street
North Chicago, Illinois 60064

Vernon Murdock, Plant Manager 847/689-3111 ext. 310

1.4 General Source Description

The Gillette Company - North Chicago Manufacturing Center is located in North Chicago, Illinois. The source manufactures bulk chemical intermediates for use in the production of personal care products and writing instruments at other Gillette facilities. The operation includes batch chemical processes and associated manufacturing processes. Some processes at the source can produce two or more different products by varying raw materials or process parameters.

2.0 LIST OF ABBREVIATIONS/ACRONYMS USED IN THIS PERMIT

| acfm | actual cubic feet per minute | | |
|-----------------|---|--|--|
| ACMA | Alternative Compliance Market Account | | |
| Act | Illinois Environmental Protection Act [415 ILCS 5/1 et seq.] | | |
| AP-42 | Compilation of Air Pollutant Emission Factors, Volume 1, Stationary Point and Other Sources (and Supplements A through F), USEPA, Office of Air Quality Planning and Standards, Research Triangle Park, NC 27711 | | |
| ATU | Allotment Trading Unit | | |
| Btu | British thermal unit | | |
| °C | degrees Celsius | | |
| CAA | Clean Air Act [42 U.S.C. Section 7401 et seq.] | | |
| CAAPP | Clean Air Act Permit Program | | |
| CAM | Compliance Assurance Monitoring | | |
| CFR | Code of Federal Regulations | | |
| CO | Carbon Monoxide | | |
| ERMS | Emissions Reduction Market System | | |
| °F | degrees Fahrenheit | | |
| ft | foot | | |
| ft ³ | cubic foot | | |
| HAP | Hazardous Air Pollutant | | |
| HCl | Hydrochloric Acid | | |
| hr | hour | | |
| IAC | Illinois Administrative Code | | |
| I.D. No. | Identification Number of Source, assigned by Illinois EPA | | |
| IFR | internal floating roof | | |
| ILCS | Illinois Compiled Statutes | | |
| Illinois EPA | Illinois Environmental Protection Agency | | |
| °K | degrees Kelvin | | |
| kg | kilogram | | |
| kPa | kilopascal | | |
| kW | kilowatt | | |
| lb | pound | | |
| lb-mole | pound mole | | |
| M | meter | | |
| M ³ | cubic meter | | |
| Mg | megagram | | |
| mmBtu | Million British thermal units | | |
| mmHg | millimeters of mercury | | |
| mo | month | | |
| mph | miles per hour | | |
| MW | megawatt | | |
| NESHAP | National Emission Standards for Hazardous Air Pollutants | | |
| NO _x | Nitrogen Oxides | | |
| NSPS | New Source Performance Standards | | |
| OM | Organic Material | | |
| рН | a measure of the acidity or alkalinity of a solution | | |

| PM | Particulate Matter | |
|------------------|---|--|
| PM ₁₀ | Particulate matter with an aerodynamic diameter less than or equal to a nominal 10 microns as measured by applicable test or monitoring methods | |
| ppm | parts per million | |
| PSD | Prevention of Significant Deterioration | |
| psi | pounds per square inch | |
| psia | pounds per square inch absolute | |
| R | degrees Rankin | |
| RMP | Risk Management Plan | |
| S | second | |
| SIC | Standard Industrial Classification | |
| SO ₂ | Sulfur Dioxide | |
| SOCMI | Synthetic Organic Chemical Manufacturing Industry | |
| Т | ton | |
| Т1 | Title I - identifies Title I conditions that have been carried over from an existing permit | |
| T1N | Title I New - identifies Title I conditions that are being established in this permit | |
| T1R | Title I Revised - identifies Title I conditions that have been carried over from an existing permit and subsequently revised in this permit | |
| USEPA | United States Environmental Protection Agency | |
| VOC | Volatile Organic Compounds | |
| VOL | Volatile Organic Liquid | |
| MOV | Volatile Organic Material | |
| wt | weight | |
| yr | year | |

3.0 INSIGNIFICANT ACTIVITIES

3.1 Identification of Insignificant Activities

The following activities at the source constitute insignificant activities as specified in 35 IAC 201.210:

3.1.1 Activities determined by the Illinois EPA to be insignificant activities, pursuant to 35 IAC 201.210(a)(1) and 201.211, as follows:

Diethanolamine storage tank (STK1422)
300 gallon hydrochloric storage tank (STK1437)
Two 125 gallon hydrochloric acid storage tanks
Aqueous salt solution storage tank (STK1441)
Fugitive emissions from system components (e.g.,
pumps, valves, and flanges) containing either
ethanol or organic material with a vapor pressure
less than 0.1 mmHg at 20 °C

3.1.2 Activities that are insignificant activities based upon maximum emissions, pursuant to 35 IAC 201.210(a)(2) or (a)(3), as follows:

Drumming operation of bulk raw product in warehouse drumming (VNT2401)

Alcohol storage tanks (STK1410, STK 1411, STK1414, STK1429)

Sulfuric acid storage tank (STK1415)
Oleum storage tank (STK1418)
Propylene glycol storage tank (STK1433)
Reactor RX_201 powdered raw material rework (RX_201)
Panning and Drying of intermediate liquid
Filter changing and cleaning fugitive emissions
Intermediate solution storage tanks (STK1434,

3.1.3 Activities that are insignificant activities based upon their type or character, pursuant to 35 IAC 201.210(a)(4) through (18), as follows:

STK1435)

Direct combustion units designed and used for comfort heating purposes and fuel combustion emission units as follows: (A) Units with a rated heat input capacity of less than 2.5 mmBtu/hr that fire only natural gas, propane, or liquefied petroleum gas; (B) Units with a rated heat input capacity of less than 1.0 mmBtu/hr that fire only oil or oil in combination with only natural gas, propane, or liquefied petroleum gas; and (C) Units with a rated heat input capacity of less than 200,000 Btu/hr which never burn refuse, or treated or chemically contaminated wood [35 IAC 201.210(a)(4)].

Equipment used for filling drums, pails, or other packaging containers, excluding aerosol cans, with soaps, detergents, surfactants, lubricating oils, waxes, vegetable oils, greases, animal fats, glycerin, sweeteners, corn syrup, aqueous salt solutions, or aqueous caustic solutions [35 IAC 201.210(a)(8)].

Storage tanks of organic liquids with a capacity of less than 10,000 gallons and an annual throughput of less than 100,000 gallons per year, provided the storage tank is not used for the storage of gasoline or any material listed as a HAP pursuant to Section 112(b) of the CAA [35 IAC 201.210(a)(10)].

Storage tanks of any size containing exclusively soaps, detergents, surfactants, glycerin, waxes, vegetable oils, greases, animal fats, sweeteners, corn syrup, aqueous salt solutions, or aqueous caustic solutions, provided an organic solvent has not been mixed with such materials [35 IAC 201.210(a)(17)].

Loading and unloading systems for railcars, tank trucks, or watercraft that handle only the following liquid materials, provided an organic solvent has not been mixed with such materials: soaps, detergents, surfactants, lubricating oils, waxes, glycerin, vegetable oils, greases, animal fats, sweetener, corn syrup, aqueous salt solutions, or aqueous caustic solutions [35 IAC 201.210(a)(18)].

- 3.1.4 Activities that are considered insignificant activities pursuant to 35 IAC 201.210(b).
- 3.2 Compliance with Applicable Requirements

Insignificant activities are subject to applicable requirements notwithstanding status as insignificant activities. In particular, in addition to regulations of general applicability, such as 35 IAC 212.301 and 212.123 (Condition 5.2.2), the Permittee shall comply with the following requirements, as applicable:

- 3.2.1 For each cold cleaning degreaser, the Permittee shall comply with the applicable equipment and operating requirements of 35 IAC 215.182, 218.182, or 219.182.
- 3.2.2 For each particulate matter process emission unit, the Permittee shall comply with the applicable particulate matter emission limit of 35 IAC 212.321 or 212.322. For example, the particulate matter emissions from a process emission unit shall not exceed 0.55 pounds per hour if the

- emission unit's process weight rate is 100 pounds per hour or less, pursuant to 35 IAC 266.110.
- 3.2.3 For each organic material emission unit that uses organic material, e.g., a mixer or printing line, the Permittee shall comply with the applicable VOM emission limit of 35 IAC 215.301, 218.301, or 219.301, which requires that organic material emissions not exceed 8.0 pounds per hour or do not qualify as photochemically reactive material as defined in 35 IAC 211.4690.
- 3.2.4 For each storage tank that stores organic material and has a storage capacity greater than 946 liters (250 gallons), the Permittee shall comply with the applicable requirements of 35 IAC 215.122, 218.122, or 219.122, which requires use of a permanent submerged loading pipe or an equivalent device approved by the Illinois EPA.
- 3.2.5 For each component of a miscellaneous organic chemical manufacturing process subject to the requirements of 35 IAC 218, Subpart RR, the Permittee shall comply with the applicable leak repair requirements of 35 IAC 218.966(c).
- 3.3 Addition of Insignificant Activities
 - 3.3.1 The Permittee is not required to notify the Illinois EPA of additional insignificant activities present at the source of a type that is identified in Condition 3.1, until the renewal application for this permit is submitted, pursuant to 35 IAC 201.212(a).
 - 3.3.2 The Permittee must notify the Illinois EPA of any proposed addition of a new insignificant activity of a type addressed by 35 IAC 201.210(a) and 201.211 other than those identified in Condition 3.1, pursuant to Section 39.5(12)(b) of the Act.
 - 3.3.3 The Permittee is not required to notify the Illinois EPA of additional insignificant activities present at the source of a type identified in 35 IAC 201.210(b).

4.0 SIGNIFICANT EMISSION UNITS AT THIS SOURCE

| | <u> </u> | 1 | · |
|--------------|-------------------------------|---------------|-----------------|
| | | <u> </u> | Emission |
| Emission | | Date | Control |
| Unit | Description | Constructed | Equipment |
| PLNT_601 | PLNT_601 Process - powder | Prior to 1980 | Venturi dust |
| | inorganic salt manufacturing | | scrubber and |
| | (pulverizer and classifier, | | separator |
| | spray dryer, dehumidifying | | system |
| | concentrator, dust scrubber, | | (PCD 601) |
| | and classifier baghouse | | _ |
| | filter) | | |
| RX 501 | RX 501 Process - dye | Prior to 1975 | RX 501 acid |
| _ | manufacturing (reactor | | _ scrubber |
| | RX 501, acid scrubber, dust | | (PCD 501) and |
| | scrubber) | | RX 501 dust |
| | , | | scrubber |
| | | | (PCD 502) |
| RX 1601 | RX 1601 Process - surfactant | Prior to 1975 | RX 1601 |
| 141_1001 | manufacturing (RX 1601 | | condenser |
| | reactor, condenser, grinder, | | (PCD 1601) and |
| | dust collector) | | RX 1601 dust |
| | dust corrector) | | collector |
| | | | (PCD 1602) |
| DV 211 | RX 311 Process - surfactants | 3/1985 | |
| RX_311 | manufacturing (RX 311 | 3/1903 | None |
| | | | |
| D37 1 E 1 1 | reactor) | Davi 1075 | DV 1511 |
| RX_1511 | Resin Reactor No.1 - resin | Prior to 1975 | RX_1511 |
| | manufacturing (reactor | | condenser |
| 1501 | RX_1511, condenser) | - 1 | (PCD_1511) |
| RX_1521 | Resin Reactor No. 2 - resin | Prior to 1975 | RX_1521 |
| | manufacturing (reactor | | condenser |
| | RX_1521, condenser) | | (PCD_1521) |
| RX_1531 | Resin Reactor No.3 - resin | Prior to 1975 | RX_1531 |
| | manufacturing (reactor | | condenser |
| | RX_1531 and condenser) | | (PCD_1531) |
| RX_401 | RX_401 Process - sulfation | Prior to 1975 | RX_401 HCl |
| | reaction (reactor RX_401, HCl | | recovery system |
| | recovery system and backup | | (PCD_401) and |
| | scrubber) | | RX 401 back-up |
| | | | scrubber |
| | | | (PCD 402) |
| RX 301 | RX 301 Process - batch | Prior to 1980 | Venturi |
| | oxidation reaction (reactor | | Scrubber |
| | RX 301) | | (PCD 350) |
| RX 201 | RX 201 Process - acid-base | 1/1983 | None |
| | reaction or blending (reactor | _, | |
| | RX 201) | | |
| PLNT 901 | PLNT 901 Process - acid-base | 1995 | None |
| 1 1111 - 701 | reaction or blending | 1000 | 140116 |
| | Teaction of premaring | | |

| Emission Unit | Description | Date Constructed | Emission Control Equipment |
|------------------|--|---------------------|----------------------------------|
| PLT_2800 | PLT_2800 Process - pigment manufacturing (mixing tub, 3-roll mill) | 5/1998 | None |
| RX_101 | RX_101 Process - inorganic acid salts (reactor RX_101) | 2/1989 | Venturi Scrubber (PCD_350) |
| RX_1702 | RX_1702 Reactor | 1959 | None |
| BO_1 | <pre>Industrial natural gas fired boiler (14.7 mmBtu/hr)</pre> | 1995 | None |
| во_2 | <pre>Industrial natural gas fired boiler (14.7 mmBtu/hr)</pre> | 1995 | None |
| STK 1413 | 11,183 gallon fixed roof aboveground hydrochloric acid storage tank | Prior to 1980 | None |
| STK 1409 | 5,000 gallon fixed roof aboveground chlorosulfonic acid storage tank | Prior to 1975 | None |

5.0 OVERALL SOURCE CONDITIONS

5.1 Source Description

- 5.1.1 This permit is issued based on the source requiring a CAAPP permit as a major source of VOM emissions.
- 5.1.2 This permit is issued based on the source not being a major source of HAPs.

5.2 Applicable Regulations

- 5.2.1 Specific emission units at this source are subject to particular regulations as set forth in Section 7 (Unit-Specific Conditions) of this permit.
- 5.2.2 In addition, emission units at this source are subject to the following regulations of general applicability:
 - a. No person shall cause or allow the emission of fugitive particulate matter from any process, including any material handling or storage activity, that is visible by an observer looking generally overhead at a point beyond the property line of the source unless the wind speed is greater than 40.2 kilometers per hour (25 miles per hour), pursuant to 35 IAC 212.301 and 212.314.

Compliance with this requirement is considered to be assured by the inherent nature of operations at this source, as demonstrated by historical operation.

- b. No person shall cause or allow the emission of smoke or other particulate matter, with an opacity greater than 30 percent, into the atmosphere from any emission unit other than those emission units subject to the requirements of 35 IAC 212.122, pursuant to 35 IAC 212.123(a), except as allowed by 35 IAC 212.123(b) and 212.124.
- c. No person shall cause or allow the emissions of sulfur dioxide into the atmosphere from any process emission unit to exceed 2,000 ppm pursuant to 35 IAC 214.301.

5.2.3 Fugitive Particulate Matter Operating Program

a. This source shall be operated under the provisions of an operating program prepared by the Permittee and submitted to the Illinois EPA for its review. Such operating program shall be designed to significantly reduce fugitive particulate matter emissions [35 IAC 212.309(a)].

- b. The operating program shall be amended from time to time by the Permittee so that the operating program is current. Such amendments shall be consistent with the requirements set forth by this Condition and shall be submitted to the Illinois EPA [35 IAC 212.312].
- c. All normal traffic pattern roads and parking facilities located at this source shall be paved or treated with water, oils, or chemical dust suppressants. All paved areas shall be cleaned on a regular basis. All areas treated with water, oils, or chemical dust suppressants shall have the treatment applied on a regular basis, as needed, in accordance with the operating program [35 IAC 212.306].

5.2.4 Ozone Depleting Substances

The Permittee shall comply with the standards for recycling and emissions reduction of ozone depleting substances pursuant to 40 CFR Part 82, Subpart F, except as provided for motor vehicle air conditioners in Subpart B of 40 CFR Part 82:

- a. Persons opening appliances for maintenance, service, repair, or disposal must comply with the required practices pursuant to 40 CFR 82.156.
- b. Equipment used during the maintenance, service, repair, or disposal of appliances must comply with the standards for recycling and recovery equipment pursuant to 40 CFR 82.158.
- c. Persons performing maintenance, service, repair, or disposal of appliances must be certified by an approved technician certification program pursuant to 40 CFR 82.161.

5.2.5 Risk Management Plan

Should this stationary source, as defined in 40 CFR Section 68.3, become subject to the Accidental Release Prevention regulations in 40 CFR Part 68, then the owner or operator shall submit [40 CFR 68.215(a)(2)(i) and (ii)]:

- a. A compliance schedule for meeting the requirements of 40 CFR Part 68 by the date provided in 40 CFR 68.10(a); or
- b. A certification statement that the source is in compliance with all requirements of 40 CFR Part 68, including the registration and submission of the Risk

Management Plan (RMP), as part of the annual compliance certification required by 40 CFR Part 70 or 71.

- 5.2.6 a. Should this stationary source become subject to a regulation under 40 CFR Parts 60, 61, or 63, or 35 IAC after the date issued of this permit, then the owner or operator shall, in accordance with the applicable regulation(s), comply with the applicable requirements by the date(s) specified and shall certify compliance with the applicable requirements of such regulation(s) as part of the annual compliance certification, as required by 40 CFR Part 70 or 71.
 - b. No later than upon the submittal for renewal of this permit, the owner or operator shall submit, as part of an application, the necessary information to address either the non-applicability of, or demonstrate compliance with all applicable requirements of any potentially applicable regulation which was promulgated after the date issued of this permit.

5.2.7 Episode Action Plan

- a. If the source is required to have an episode action plan pursuant to 35 IAC 244.142, the Permittee shall maintain at the source and have on file with the Illinois EPA a written episode action plan (plan) for reducing the levels of emissions during yellow alerts, red alerts, and emergencies, consistent with safe operating procedures. The plan shall contain the information specified in 35 IAC 244.144.
- b. The Permittee shall immediately implement the appropriate steps described in this plan should an air pollution alert or emergency be declared.
- c. If a change occurs at the source which requires a revision of the plan (e.g., operational change, change in the source contact person), a copy of the revised plan shall be submitted to the Illinois EPA for review within 30 days of the change. Such plans shall be further revised if disapproved by the Illinois EPA.
- d. For sources required to have a plan pursuant to 35 IAC 244.142, a copy of the original plan and any subsequent revisions shall be sent to:
 - i. Illinois EPA, Compliance Section; and

- ii. For sources located in Cook County and outside
 of the city of Chicago: Cook County
 Department of Environmental Control; or

5.2.8 CAM Plan

This stationary source has a pollutant-specific emissions unit that is subject to 40 CFR Part 64, Compliance Assurance Monitoring (CAM) for Major Stationary Sources. The source must submit a CAM plan for each affected pollutant-specific emissions unit upon application for renewal of the initial CAAPP permit, or upon a significant modification to the CAAPP permit for the construction or modification of a large pollutant-specific emissions unit which has the potential post-control device emissions of the applicable regulated air pollutant that equals or exceeds major source threshold levels.

5.3 Non-Applicability of Regulations of Concern

None

5.4 Source-Wide Operational and Production Limits and Work Practices

In addition to the source-wide requirements in the Standard Permit Conditions in Section 9, the Permittee shall fulfill the following source-wide operational and production limitations and/or work practice requirements:

- 5.4.1 Upon request by the Illinois EPA, the visible emissions from the emission units which emit PM shall be measured using USEPA Reference Method 9 (40 CFR Part 60, Appendix A) and shall be reported to the Illinois EPA as specified in the request [35 IAC 212.110 and Section 39.5(7)(b) of the Act].
- 5.4.2 Upon request by the Illinois EPA, the VOM emissions from the emission units which emit VOM shall be measured using USEPA Reference Method 18, 25, or 25A (40 CFR Part 60, Appendix A) and shall be reported to the Illinois EPA as specified in the request [35 IAC 218.105 and Section 39.5(7)(b) of the Act].
- 5.5 Source-Wide Emission Limitations
 - 5.5.1 Permitted Emissions for Fees

The annual emissions from the source, not considering insignificant activities as addressed by Section 3.0 of this permit, shall not exceed the following limitations.

The overall source emissions shall be determined by adding emissions from all emission units. Compliance with these limits shall be determined on a calendar year basis. These limitations (Condition 5.5.1) are set for the purpose of establishing fees and are not federally enforceable.

Permitted Emissions of Regulated Pollutants

| Pollutant | Tons/Year |
|------------------------------------|-----------|
| Volatile Organic Material (VOM) | 35.235 |
| Sulfur Dioxide (SO ₂) | 2.043 |
| Particulate Matter (PM) | 30.510 |
| Nitrogen Oxides (NO _x) | 26.526 |
| HAP, not included in VOM or PM | 9.408 |
| TOTAL | 103.722 |

5.5.2 Emissions of Hazardous Air Pollutants

The emissions of HAPs from the source shall be less than 10 tons/year for each individual HAP and 25 tons/year for all HAPs combined. Compliance with these limits shall be based on a running total of 12 months of data, with emissions calculated using standard USEPA methodology, e.g., by appropriately summing the product of the vapor weight percent of each HAP in the VOM emissions for each organic liquid and the VOM emissions attributable to the storage and handling of that liquid.

This condition is being imposed at the request of the Permittee so that the source is not a major source of HAP emissions and the requirements of 40 CFR Part 63, National Emission Standards for Hazardous Air Pollutants, do not apply to the source.

5.5.3 Other Source-Wide Emission Limitations

Other source-wide emission limitations are not set for this source pursuant to either the federal rules for Prevention of Significant Deterioration (PSD), 40 CFR 52.21, Illinois EPA rules for Major Stationary Sources Construction and Modification, 35 IAC Part 203, or Section 502(b)(10) of the CAA. However, there may be unit specific emission limitations set forth in Section 7 of this permit pursuant to these rules.

5.6 General Recordkeeping Requirements

5.6.1 Emission Records

The Permittee shall maintain records of the following items for the source to demonstrate compliance with Condition 5.5.1, pursuant to Section 39.5(7)(b) of the Act:

- a. Total annual emissions on a calendar year basis for the emission units covered by Section 7 (Unit Specific Conditions) of this permit.
- b. The Permittee shall keep records of VOM emissions from all emission units which are exempt from the requirements of 35 IAC 218, Subpart RR, for equipment identified in Section 7.0 of this permit.

5.6.2 Records for VOM and HAP Emissions

The Permittee shall maintain records of the following items for the source to verify that the source is not a major source of HAP emissions, and to quantify annual VOM and HAP emissions, so as to demonstrate compliance with the annual emission limits in Condition 5.5:

- Aggregate VOM emissions from emission units included in Section 7 of this permit; and
- b. Aggregate HAP emissions from emission units included in Section 7 of this permit, calculated as a fraction of VOM emissions, according to vapor weight percent of each HAP, plus HAP emissions which are not considered VOM (e.g., hydrogen chloride).
- c. Aggregate HAP emissions from insignificant activities included in Section 3 of this permit which store or handle hazardous air pollutants.

5.6.3 Records for Operating Scenarios

N/A

5.6.4 Retention and Availability of Records

- a. All records and logs required by this permit shall be retained for at least five years from the date of entry (unless a longer retention period is specified by the particular recordkeeping provision herein), shall be kept at a location at the source that is readily accessible to the Illinois EPA or USEPA, and shall be made available for inspection and copying by the Illinois EPA or USEPA upon request.
- b. The Permittee shall retrieve and print, on paper during normal source office hours, any records retained in an electronic format (e.g., computer) in response to an Illinois EPA or USEPA request for records during the course of a source inspection.

5.7 General Reporting Requirements

5.7.1 General Source-Wide Reporting Requirements

The Permittee shall promptly notify the Illinois EPA, Compliance Section, of deviations of the source with the permit requirements as follows, pursuant to Section 39.5(7)(f)(ii) of the Act. Reports shall describe the probable cause of such deviations, and any corrective actions or preventive measures taken.

5.7.2 Annual Emissions Report

The annual emissions report required pursuant to Condition 9.7 shall contain emissions information for the previous calendar year.

5.7.3 Annual Reporting of HAP Emissions

The Permittee shall submit an annual report to the Illinois EPA, Compliance Section, on HAP emissions from the source, including the following information, so as to demonstrate whether the source is being operated as a non-major source of HAP emissions. This report shall be submitted with the Annual Emissions Report (Condition 9.7).

- a. The annual emissions of individual HAPs for each month of the previous calendar year sufficient to demonstrate compliance with the 12 month running total of Condition 5.5.2, tons/year, (e.g., for the month of January, the emissions from February of the preceding calendar year through January; for the month of February, the emissions from March of the preceding calendar year through February; 12 months in all); and
- b. The total annual emissions of all HAPs combined for each month of the previous calendar year sufficient to demonstrate compliance with the 12 month running total of Condition 5.5.2, tons/year, (e.g., for the month of January, the emissions from February of the preceding calendar year through January; for the month of February, the emissions from March of the preceding calendar year through February; 12 months in all).
- 5.8 General Operational Flexibility/Anticipated Operating Scenarios

The Permittee may vary the raw materials or process parameters for the emission units at this source to manufacture different products, provided that the emission limits contained in this permit are not exceeded. This condition does not affect the Permittee's obligation to properly obtain a construction permit

in a timely manner for any activity constituting construction or modification of an emission unit, as defined in 35 IAC 201.102.

5.9 General Compliance Procedures

5.9.1 General Procedures for Calculating Emissions

Compliance with the source-wide emission limits specified in Condition 5.5 shall be based on the recordkeeping and reporting requirements of Conditions 5.6 and 5.7, and compliance procedures in Section 7 (Unit Specific Conditions) of this permit.

- a. For the purpose of estimating VOM, NO_x , SO_2 , CO, PM emissions from natural gas combustion units, the current version of USEPA's AP-42 emission factors is acceptable.
- b. For the purpose of estimating emissions from the storage tanks, the most recent version of TANKS is acceptable.
- c. For the purpose of estimating VOM from all processes (i.e., reactor and associated equipment), methods from the following USEPA documents may be followed:
 - i. Control of Volatile Organic Compound Emissions from Batch process - Alternative Control Techniques Information Document (EPA-450/R-94-020), current version.
 - ii. Control of Volatile Organic Compound Emissions from Manufacture of Synthesized Pharmaceutical Products (EPA-450/2-78-029), current version.
- d. For the purpose of estimating fugitive VOM from leaking piping components at the facility, the average emissions factor approach found in USEPA's document "Protocol for Equipment Leak Emission Estimates", (EPA-453/R-93-026, June 1993), is acceptable.
- e. For the purpose of estimating HAP emissions from equipment at the source, the vapor weight percent of each HAP for each organic liquid times the VOM emissions contributed by that organic liquid is acceptable.

6.0 EMISSIONS REDUCTION MARKET SYSTEM (ERMS)

6.1 Description of ERMS

The ERMS is a "cap and trade" market system for major stationary sources located in the Chicago ozone nonattainment area. It is designed to reduce VOM emissions from stationary sources to contribute to reasonable further progress toward attainment, as required by Section 182(c) of the CAA.

The ERMS addresses VOM emissions during a seasonal allotment period from May 1 through September 30. Participating sources must hold "allotment trading units" (ATUs) for their actual seasonal VOM emissions. Each year participating sources are issued ATUs based on allotments set in the sources' CAAPP permits. These allotments are established from historical VOM emissions or "baseline emissions" lowered to provide the emissions reductions from stationary sources required for reasonable further progress.

By December 31 of each year, the end of the reconciliation period following the seasonal allotment period, each source should have sufficient ATUs in its transaction account to cover its actual VOM emissions during the preceding season. A transaction account's balance as of December 31 will include any valid ATU transfer agreements entered into as of December 31 of the given year, provided such agreements are promptly submitted to the Illinois EPA for entry into the transaction account database. The Illinois EPA will then retire ATUs in sources' transaction accounts in amounts equivalent to their seasonal emissions. When a source does not appear to have sufficient ATUs in its transaction account, the Illinois EPA will issue a notice to the source to begin the process for Emissions Excursion Compensation.

In addition to receiving ATUs pursuant to their allotments, participating sources may also obtain ATUs from the market, including ATUs bought from other participating sources and general participants in the ERMS that hold ATUs (35 IAC 205.630) and ATUs issued by the Illinois EPA as a consequence of VOM emissions reductions from an Emissions Reduction Generator or an Intersector Transaction (35 IAC 205.500 and 35 IAC 205.510). During the reconciliation period, sources may also buy ATUs from a secondary reserve of ATUs managed by the Illinois EPA, the "Alternative Compliance Market Account" (ACMA) (35 IAC 205.710). Sources may also transfer or sell the ATUs that they hold to other sources or participants (35 IAC 205.630).

6.2 Applicability

Emissions of VOM from the source during the seasonal allotment period from May 1 through September 30 of each year shall not exceed 15 tons, not including VOM emissions from insignificant emission units and activities as identified in Section 3 of this permit. This limitation is established at the request of the

source to exempt it from the requirements of 35 IAC Part 205, Emissions Reduction Market System (ERMS), pursuant to 35 IAC 205.205.

6.3 Recordkeeping and Reporting

- a. The Permittee shall maintain the following records to determine compliance with the above limitation:
 - i. Records of operating data and other information for each individual emission unit or group of related emission units at the source, as specified in Sections 5 and 7 of this permit, as appropriate, to determine actual VOM emissions during the seasonal allotment period;
 - ii. Records of the VOM emissions, in tons, during the seasonal allotment period, with supporting calculations, for each individual emission unit or group of related emission units at the source, determined in accordance with the procedures specified in Sections 5 and 7 of this permit; and
 - iii. Total VOM emissions from the source, in tons, during each seasonal allotment period.
- b. The Permittee shall submit the seasonal emissions component of the Annual Emissions Report by November 30 of each year, reporting actual emissions of VOM during the seasonal allotment period, in accordance with 35 IAC 205.205(b) and 35 IAC 205.300.
- c. In the event that the source's VOM emissions during the seasonal allotment period exceed 15 tons, the source shall no longer be exempt from the ERMS and beginning with the following seasonal allotment period, shall comply with 35 IAC Part 205, by holding allotment trading units (ATUs) for its VOM emissions during each seasonal allotment period.

6.4 Federal Enforceability

Section 6.0 becomes federally enforceable upon approval of the ERMS by USEPA as part of Illinois' State Implementation Plan.

7.0 UNIT SPECIFIC CONDITIONS

7.1 Units - Organic Chemical Manufacturing Processes Requiring VOM Control

Control - Condensers and Dust Collector

7.1.1 Description

RX 1601 Process

This process consists of a 750 gallon reactor (RX_1601) and condenser. Surfactants are produced in this reactor by chemical reactions. These products are either drummed right from the reactor, or are dried and taken through a grinding step before drumming.

The VOM emissions from this reactor are captured by a condenser, where the volatile components are cooled to their liquid state. The condensate is drummed for reuse or disposal depending on the product. The PM emissions created from the grinding operations performed on some of the products are captured by a baghouse filter.

The RX_1601 Reactor has three distinct operating scenarios. In Operating Scenarios 1 and 2, a condenser is operated to reduce VOM emissions. In addition, in Operating Scenario 2 certain products are sent to be panned and dried. The dried product is then sent to the RX_1601 Grinder which has a dust collector. In Operating Scenario 3, less than one ton per year of VOM is produced, and therefore, a control device is not required. In this case the exhaust is vented through the condenser without the condenser being operational.

RX 1511, RX 1521, and RX 1531 Processes

Reactors RX_1511 and RX_1521 are 1,000-gallon reactors, and Reactor RX_1531 is a 600-gallon reactor. These reactors are used to manufacture resins through chemical reactions. Blending of raw materials may also occur in these vessels. These bulk resin solutions are shipped off-site for use in the manufacture of hair sprays.

The VOM emissions from these reactors are captured by individual reflux condensers. These condensers cool the volatile material back into a liquid condensate, which is returned directly into the reactors during the reaction. All emissions from charging the reactors and filling the product drums are vented away from the area.

7.1.2 List of Emission Units and Air Pollution Control Equipment

| Emission | | Emission Control |
|----------|--|---|
| Unit | Description | Equipment |
| RX_1601 | RX_1601 process - surfactant manufacturing (RX_1601 reactor, condenser, grinder, dust collector) | RX_1601 condenser (PCD_1601) and RX_1601 dust collector (PCD_1602) |
| RX_1511 | Resin Reactor No.1 - resin manufacturing (reactor RX 1511, condenser) | RX_1511 condenser (PCD 1511) |
| RX_1521 | Resin Reactor No. 2 - resin manufacturing (reactor RX_1521, condenser) | RX_1521 condenser (PCD_1521) |
| RX_1531 | Resin Reactor No.3 - resin manufacturing (reactor RX_1531 and condenser) | RX_1531 condenser (PCD_1531) |

7.1.3 Applicability Provisions and Applicable Regulations

- a. The "affected chemical manufacturing processes" for the purpose of these unit-specific conditions, are the emission units used to produce various organic chemicals, as listed in Condition 7.1.2.
- b. The affected chemical manufacturing processes are subject to 35 IAC 218 Subpart RR, Miscellaneous Organic Chemical Manufacturing Processes. Pursuant to 35 IAC 218.966(a), every owner or operator of a miscellaneous organic chemical manufacturing process emission unit subject to 35 IAC 218 Subpart RR shall employ emission capture and control techniques which achieve an overall reduction in uncontrolled VOM emissions of at least 81 percent from each emission unit.
- c. The affected chemical manufacturing processes are subject to 35 IAC 218.301, which provides that:

No person shall cause or allow the discharge of more than $3.6~\mathrm{kg/hr}$ ($8~\mathrm{lb/hr}$) of organic material into the atmosphere from any emission unit, except as provided in $35~\mathrm{IAC}$ 218.302 and the following exception: If no odor nuisance exists the limitation of $35~\mathrm{IAC}$ 218 Subpart G shall apply only to photochemically reactive material [$35~\mathrm{IAC}$ 218.301].

d. The affected chemical manufacturing processes are subject to 35 IAC 212.321, which provides that:

No person shall cause or allow the emission of particulate matter into the atmosphere in any one

hour period from any new process emission unit, either alone or in combination with the emission of particulate matter from all other similar process emission units for which construction or modification commenced on or after April 14, 1972, at a source or premises, exceeds the allowable emission rates specified in subsection (c) of 35 IAC 212.321 (See also Attachment 2) [35 IAC 212.321(a)].

7.1.4 Non-Applicability of Regulations of Concern

- a. This permit is issued based on the affected chemical manufacturing processes not being subject to 35 IAC 218 Subpart V, because the source does not meet the applicability criteria in 35 IAC 218.500.
- b. This permit is issued based on the affected chemical manufacturing processes not being subject to the 40 CFR Part 60, Subparts V V, III, NNN, and RRR, for SOCMI processes and leaks, because the affected chemical manufacturing processes do not produce, as an intermediate or primary product, one or more of the chemicals listed in 40 CFR 60.489, and do not produce as a product, co-product, by-product, or intermediate any of the chemicals listed in 60.617, 60.667, or 60.707.
- c. This permit is issued based on the affected chemical manufacturing processes not being subject to the 40 CFR Part 60, Subparts DDD, for polymer manufacturing, because the affected chemical manufacturing processes do not manufacture any of the materials affected by this subpart.
- d. This permit is issued based on the affected chemical manufacturing processes not being subject to 40 CFR Part 63, Subparts F through I, for SOCMI processes and leaks, because the affected chemical manufacturing processes do not produce, as a primary product, one of the chemicals listed in Table 1 of 40 CFR 63, Subpart F.
- e. This permit is issued based on the affected chemical manufacturing processes not being subject to 40 CFR Part 63, Subparts U, W, JJJ, and OOO, for polymer and resin manufacturing, because the affected chemical manufacturing processes do not manufacture any of the materials affected by these subparts.

7.1.5 Operational and Production Limits and Work Practices

a. The condensers listed in Condition 7.1.2 shall be operated to achieve an overall reduction in uncontrolled VOM emissions of at least 81 percent

from each affected chemical manufacturing process [35 IAC 218.966(a)].

- b. Any leaks from components subject to the control requirements of 35 IAC 218 Subpart RR shall be subject to the following control requirements [35 IAC 218.966(c)]:
 - i. Repair any component from which a leak of VOL can be observed. The repair shall be completed as soon as practicable but no later than 15 days after the leak is found, unless the leaking component cannot be repaired until the process unit is shut down, in which case the leaking component must be repaired before the unit is restarted.
- c. The Permittee shall follow good operating practices for the condensers and dust collector, including periodic inspection, routine maintenance and prompt repair of defects.
- d. Operation of the affected chemical manufacturing processes shall not exceed the following limits:

| Emission | Operating Rate | | | |
|-----------------|----------------|----------|----------|--|
| Unit (Scenario) | Ton/Batch | Batch/Mo | Batch/Yr | |
| | | | | |
| RX_1511 | 3.30 | 60 | 490 | |
| RX 1521 | 3.30 | 60 | 490 | |
| RX 1531 | 2.02 | 60 | 575 | |
| RX 1601 (1) | 4.56 | 90 | 190 | |
| RX 1601 (2) | 1.29 | 60 | 137 | |
| RX 1601 (3) | 3.97 | 730 | 730 | |

7.1.6 Emission Limitations

In addition to Condition 5.2.2 and the source wide emission limitations in Condition 5.5, the affected chemical manufacturing processes are subject to the following:

a. Emissions from the affected chemical manufacturing processes shall not exceed the following limits:

| Emission | MOV | Emissions |
|----------------------|-----------|-----------|
| Unit (Scenario) | Ton/Month | Ton/Year |
| | | |
| RX 1511 | 0.62 | 5.00 |
| RX 1521 | 0.62 | 5.00 |
| RX 1531 | 0.47 | 4.50 |
| $-\frac{1}{601}$ (1) | 4.54 | 9.59 |

| Emission | MOV | Emissions |
|-----------------|-----------|-----------------|
| Unit (Scenario) | Ton/Month | <u>Ton/Year</u> |
| | | |
| RX_1601 (2) | 2.19 | 5.00 |
| RX 1601 (3) | 0.12 | 0.12 |
| TOTAL | 8.56 | 29.21 |

These limits are based on the operating rate limits in Condition 7.1.5(d), USEPA guidance for emissions estimation for vapor displacement, vessel heating, depressurization, and vessel purging and 81 percent overall control efficiency for the condensers.

Compliance with annual limits shall be determined on a monthly basis from the sum of the data for the current month plus the preceding 11 months (running 12 month total) [T1R].

The above limitations contain revisions to previously issued Permit 73110008. The source has requested that the Illinois EPA establish conditions in this permit that allow various refinements from the conditions of this aforementioned permit, consistent with the information provided in the CAAPP application. The source has requested these revisions and has addressed the applicability and compliance of Title I of the CAA, specifically 35 IAC Part 203, Major Stationary Sources Construction and Modification and/or 40 CFR 52.21, Prevention of Significant Deterioration (PSD). These limits continue to ensure that the construction and/or modification addressed in this permit does not constitute a new major source or major modification pursuant to these rules. These limits are the primary enforcement mechanism for the equipment and activities permitted in this permit and the information in the CAAPP application contains the most current and accurate information for the source. Specifically, the total annual emission limit for RX 1601 was increased by 4.71 tons per year and the monthly limits were increased to provide operational flexibility [T1R].

b. This permit is issued based on negligible emissions of particulate matter from the RX_1601 grinder. For this purpose, emissions shall not exceed nominal emission rates of 0.5 pound per hour and 1.00 ton per year.

Compliance with annual limits shall be determined on a monthly basis from the sum of the data for the current month plus the preceding 11 months (running 12 month total) [T1R].

The above limitations contain revisions to previously issued Permit 85030060. The source has requested that the Illinois EPA establish conditions in this permit that allow various refinements from the conditions of this aforementioned permit, consistent with the information provided in the CAAPP application. The source has requested these revisions and has addressed the applicability and compliance of Title I of the CAA, specifically 35 IAC Part 203, Major Stationary Sources Construction and Modification and/or 40 CFR 52.21, Prevention of Significant Deterioration (PSD). These limits continue to ensure that the construction and/or modification addressed in this permit does not constitute a new major source or major modification pursuant to these rules. These limits are the primary enforcement mechanism for the equipment and activities permitted in this permit and the information in the CAAPP application contains the most current and accurate information for the source. Specifically, the emission limits were increased by 0.3 pounds per hour and 0.56 ton per year [T1R].

c. This permit is issued based on VOM emissions from Scenario 3 operation of reactor RX_1601 not exceeding 1.0 tons per year and VOM emissions not exceeding 5.0 tons per year from all emission units at this source not complying with 35 IAC 218.966.

Compliance with annual limits shall be determined on a calendar year basis from the sum of the data for each month in the current year [T1N].

The above limitations are being established in this permit. These limits ensure that the affected chemical manufacturing processes are not subject to the control requirements of 35 IAC Part 218, Subpart RR, Miscellaneous Organic Chemical Manufacturing Processes [T1N].

7.1.7 Testing Requirements

Pursuant to 35 IAC 218.968(a) and Section 39.5(7)(d) of the Act, when in the opinion of the Illinois EPA it is necessary to conduct testing to demonstrate compliance with 35 IAC 218.966 (see also Condition 7.1.3(c)), the owner or operator of a VOM emission unit subject to the requirements of 35 IAC 218 Subpart RR shall, at his own expense, conduct such tests in accordance with the applicable test methods and procedures specified in 35 IAC 218.105, as follows:

a. For control device efficiency testing and monitoring, the control device efficiency shall be determined by simultaneously measuring the inlet and outlet gas phase VOM concentrations and gas volumetric flow rates in accordance with the gas phase test methods specified in 35 IAC 218.105(f) (see also Condition 7.1.7(c)) [35 IAC 218.105(d)(1)].

- b. The overall efficiency of the emission control system shall be determined as the product of the capture system efficiency and the control device efficiency or by the liquid/liquid test protocol as specified in 40 CFR 60.433 for each solvent recovery system. In those cases in which the overall efficiency is being determined for an entire line, the capture efficiency used to calculate the product of the capture and control efficiency is the total capture efficiency over the entire line [35 IAC 218.105(e)(1)].
- c. Volatile Organic Material Gas Phase Source Test Methods: The methods in 40 CFR Part 60, Appendix A, delineated below shall be used to determine control device efficiencies:
 - i. CFR Part 60, Appendix A, Method 18, 25 or 25A, as appropriate to the conditions at the site, shall be used to determine VOM concentration. Method selection shall be based on consideration of the diversity of organic species present and their total concentration and on consideration of the potential presence of interfering gases. The test shall consist of three separate runs, each lasting a minimum of 60 minutes, unless the Illinois EPA and the USEPA determine that process variables dictate shorter sampling times [35 IAC 218.105(f)(1)];
 - ii. CFR Part 60, Appendix A, Method 1 or 1A, shall be used for sample and velocity traverses [35 IAC 218.105(f)(2)];
 - iii. CFR Part 60, Appendix A, Method 2, 2A, 2C or 2D, shall be used for velocity and volumetric flow rates [35 IAC 218.105(f)(3)];
 - iv. CFR Part 60, Appendix A, Method 3, shall be used for gas analysis [35 IAC 218.105(f)(4)];
 - v. CFR Part 60, Appendix A, Method 4, shall be used for stack gas moisture [35 IAC 218.105(f)(5)];
 - vi. CFR Part 60, Appendix A, Methods 2, 2A, 2C, 2D, 3 and 4, shall be performed, as applicable, at least twice during each test run [35 IAC 218.105(f)(6)]; and

vii. Use of an adaptation to any of the test methods specified in 35 IAC 218.105(f)(1) through (6) (see also Conditions 7.1.7(c)(i) through (vi)) may not be used unless approved by the Illinois EPA and the USEPA on a case by case basis. An owner or operator must submit sufficient documentation for the Illinois EPA and the USEPA to find that the test methods specified in 35 IAC 218.105(f)(1) through (6) (see also Conditions 7.1.7(c)(i) through (vi)) will yield inaccurate results and that the proposed adaptation is appropriate [35 IAC 218.105(f)(7)].

7.1.8 Monitoring Requirements

a. The owner or operator of the affected chemical manufacturing processes shall monitor the following parameters to ensure at least 81 percent overall control of VOM emissions:

| Trans. 2 | | O + 1 |
|----------|-----|---------|
| EMISSI | Lon | Control |

| <u>Equipment</u> | <u>Parameter</u> |
|----------------------------------|--|
| PCD_1511 PCD_1521 PCD_1531 | condenser outlet temperature condenser outlet temperature condenser outlet temperature |
| PCD_1601 | condenser coolant inlet temperature |

b. Pursuant to Section 39.5(7)(d)(ii) of the Act, the Permittee shall, at a minimum, perform quarterly visual inspections of the affected chemical manufacturing processes to detect any leaking components which may need repair in accordance with Condition 7.1.5(b).

7.1.9 Recordkeeping Requirements

In addition to the records required by Condition 5.6, the Permittee shall maintain records of the following items for each affected chemical manufacturing process to demonstrate compliance with Conditions 5.5.1 and 7.1.5 through 7.1.8, pursuant to Section 39.5(7)(b) of the Act:

- a. Records of the testing of the efficiency of each capture system and control device pursuant to Condition 7.1.7, which include the following [Section 39.5(7)(e) of the Act]:
 - i. The date, place and time of sampling or measurements;
 - ii. The date(s) analyses were performed;

- iii. The company or entity that performed the analyses;
- iv. The analytical techniques or methods used;
- v. The results of such analyses; and
- vi. The operating conditions as existing at the time of sampling or measurement.
- b. Pursuant to 35 IAC 218.991(a)(2) and Section 39.5(7)(e)(ii) of the Act, any owner or operator of a VOM emission unit which is subject to the requirements of 35 IAC 218 Subpart RR and complying by the use of emission capture and control equipment shall collect and record all of the following information each operating day and maintain the information at the source for a period of five years:
 - i. Control device monitoring data [35 IAC
 218.991(a)(2)(A)];
 - ii. A log of operating time for the capture system, control device, monitoring equipment and the associated emission unit [35 IAC 218.991(a)(2)(B)]; and
 - iii. A maintenance log for the capture system, control device and monitoring equipment detailing all routine and non-routine maintenance performed including dates and duration of any outages [35 IAC 218.991(a)(2)(C)].
- c. Documentation (i.e., stack test results, detailed calculations) indicating that the monitored condenser outlet temperature is representative of 81 percent overall control of VOM emissions.
- d. Records of the leak detection inspections pursuant to Condition 7.1.8, which include the following:
 - i. The date, place and time of visual inspections;
 - ii. The company or entity that performed the visual inspection;
 - iii. The results of such inspections; and
 - iv. The operating conditions as existing at the time of the inspections.

- e. Pursuant to 35 IAC 218.966(c)(2) and Section 39.5(7)(e)(ii) of the Act, for any observed leak of VOL which cannot be readily repaired within one hour after detection, the following records shall be kept. These records shall be maintained by the owner or operator for a minimum of five years after the date on which they are made. Copies of the records shall be made available to the Illinois EPA or USEPA upon verbal or written request.
 - i. The name and identification of the leaking component [35 IAC 218.966(c)(2)(A)];
 - ii. The date and time the leak is detected [35 IAC 218.966(c)(2)(B)];
 - iii. The action taken to repair the leak [35 IAC 218.966(c)(2)(C)]; and
 - iv. The date and time the leak is repaired [35 IAC 218.966(c)(2)(D)].
- f. Records addressing use of good operating practices for the control equipment (condensers and dust collector):
 - Records for periodic inspection of the condensers with date, individual performing the inspection, and nature of inspection; and
 - ii. Records for prompt repair of defects, with identification and description of defect, effect on emissions, date identified, date repaired, and nature of repair.
- g. Records of operation and emissions of each affected chemical manufacturing process, including the following:
 - Types and quantities of dry raw materials used in the RX_1511, RX_1521, and RX_1531 processes, lb/month and ton/year;
 - ii. Types and quantities of raw materials used in each scenario of the RX_1601 process, ton/batch;
 - iii. The number of batches begun, including the number of batches for each scenario of the RX 1601 process;
 - iv. The process weight rate (ton/hr) for each affected chemical manufacturing process, to

determine the emission limit indicated by Condition 7.1.3(d); and

- v. The aggregate monthly and annual VOM and PM emissions from the affected chemical manufacturing processes based on the material and solvent usage and control device efficiencies, with supporting calculations.
- h. The Permittee shall keep records of the total VOM emissions from all emission units which are exempt from the requirements of 35 IAC 218, Subpart RR, including Scenario 3 operation for reactor RX 1601.
- i. Documentation, including all detailed calculations, indicating development of emission factors and control device efficiencies used to determine emissions.

7.1.10 Reporting Requirements

The Permittee shall promptly notify the Illinois EPA, Compliance Section, of deviations of an affected chemical manufacturing process with the permit requirements as follows, pursuant to Section 39.5(7)(f)(ii) of the Act. Reports shall describe the probable cause of such deviations, and any corrective actions or preventive measures taken:

- a. The owner or operator of a subject VOM emission unit shall notify the Illinois EPA of any violation of the requirements of 35 IAC 218 Subpart RR (see also Condition 7.1.3(c)) by sending a copy of any record showing a violation to the Illinois EPA within 30 days following the occurrence of the violation [35 IAC 218.991(a)(3)(A)].
- b. Upon request by the Illinois EPA, the owner or operator of an emission unit which is exempt from the requirements of 35 IAC Subpart RR (e.g., Operating Scenario 3), shall submit records to the Illinois EPA within 30 calendar days from the date of the request that document that the emission unit is exempt from those requirements [35 IAC 218.990].

c. Reports of Deviations

If there is an exceedance of the requirements of this permit as determined by the records required by this permit, the Permittee shall submit a report to the Illinois EPA's Compliance Section in Springfield, Illinois, within 30 days after the exceedance. The report shall include the emissions released in accordance with the recordkeeping requirements, a

copy of the relevant records, and a description of the exceedance or violation and efforts to reduce emissions and future occurrences [Section 39.5(7)(f)(ii) of the Act.

d. The Permittee shall promptly notify the Illinois EPA of emissions of VOM in excess of the limits in Conditions 7.1.3 and/or 7.1.6, within 30 days of such an occurrence.

7.1.11 Operational Flexibility/Anticipated Operating Scenarios

The Permittee is authorized to make the following physical or operational change with respect to the affected chemical manufacturing processes without prior notification to the Illinois EPA or revision of this permit. This condition does not affect the Permittee's obligation to properly obtain a construction permit in a timely manner for any activity constituting construction or modification of the source, as defined in 35 IAC 201.102:

a. Operation of an affected chemical manufacturing process with the condensers not in operation is allowed for production of certain materials (e.g., Operating Scenario 3), if the actual annual VOM emissions from such production is less than 1.0 ton per calendar year. Emissions during such times shall be included in the calculation of emissions exempt from the control requirements of 35 IAC 218, Subpart RR pursuant to 35 IAC 218.960(d) (see also Condition 5.6.1(b)).

7.1.12 Compliance Procedures

a. To determine compliance with Conditions 5.5.1, 7.1.3, and 7.1.6, emissions from the affected organic chemical manufacturing processes shall be calculated using the appropriate operating records and emissions factors recorded pursuant to Condition 7.1.9 or the following emission factors:

| | | Controlled |
|----------------------|-----------|--------------------------|
| Emission Unit | Pollutant | Emission Factor |
| RX_1601 (Scenario 1) | MOV | 100.95 lb/batch |
| RX_1601 (Scenario 2) | MOV | 73 lb/batch |
| RX 1601 (Scenario 2) | PM | 1 lb/batch |
| RX_1601 (Scenario 3) | MOV | 0.33 lb/batch |
| RX_1511, 1521, 1531 | PM | 0.001 lb/lb dry material |
| RX_1511 and 1521 | MOV | 19.79 lb/batch |
| RX 1531 | VOM | 15.20 lb/batch |

7.2 Units - Organic Chemical Manufacturing Processes Not Requiring VOM Control

Control - HCl Absorber and Dust Scrubber

7.2.1 Description

RX 311 Process

This process consists of a 2,000-gallon reactor (RX_311) which is used to facilitate an amidization reaction. The products are surfactants which are used as bulk material in other processes or shipped off-site. Emissions are due to volatilization of the raw materials.

RX 401 Process

This process consists of a 750-gallon reactor (RX $_401$) and a neutralization tank. The reactor is used to facilitate a sulfation reaction to manufacture raw bulk product which is stored and shipped off-site.

The process also utilizes a HCl absorber process to recover reusable HCl and reduce HCl emissions. The HCl recovery system captures the HCl gas as it volatilizes during the reaction. The reactor has a back-up scrubber to control the HCl emissions, which is only utilized when the recovery process is not operational.

PLNT 901 Process

This process consists of a series of tanks (PLNT_901) for blending, evaporating, vacuum fractionation, and condensing raw materials for reuse. The products are salt solutions which are shipped off-site.

PLT 2800 Process

Dispersed pigment is made in a mixing tub and then milled on a three-roll mill. The dispersed pigment is then drummed for shipment.

RX-1702 Process

This process consists of a 100-gallon reactor, which is used for research and development purposes using a variety of raw materials.

7.2.2 List of Emission Units and Air Pollution Control Equipment

| Emission | | Emission Control |
|----------|------------------------------|---------------------|
| Unit | Description | Equipment |
| RX_311 | RX_311 Process - surfactants | None |
| | manufacturing (RX_311 | |
| | reactor) | |
| RX_401 | RX_401 Process - sulfation | RX_401 HCl recovery |
| | reaction (reactor RX_401, | system (PCD_401) |
| | HCl recovery system and | and RX_401 back-up |
| | backup scrubber) | scrubber (PCD_402) |

| Emission | | Emission Control |
|----------|------------------------------|------------------|
| Unit | Description | Equipment |
| PLNT_901 | PLNT_901 Process - acid-base | None |
| _ | reaction or blending | |
| PLT_2800 | PLT_2800 Process - pigment | None |
| | manufacturing (mixing tub, | |
| | 3-roll mill) | |
| RX_1702 | RX_1702 Reactor | None |

7.2.3 Applicability Provisions and Applicable Regulations

- a. The "affected chemical manufacturing processes" for the purpose of these unit-specific conditions, are the emission units used to produce various organic chemicals, and which do not require VOM emissions control, as listed in Condition 7.2.2.
- b. The affected chemical manufacturing processes are subject to 35 IAC 218.301, which provides that:

No person shall cause or allow the discharge of more than $3.6~{\rm kg/hr}$ ($8~{\rm lb/hr}$) of organic material into the atmosphere from any emission unit, except as provided in $35~{\rm IAC}~218.302$ and the following exception: If no odor nuisance exists the limitation of $35~{\rm IAC}~218$ Subpart G shall apply only to photochemically reactive material [$35~{\rm IAC}~218.301$].

c. The affected chemical manufacturing processes are subject to 35 IAC 212.321, which provides that:

No person shall cause or allow the emission of particulate matter into the atmosphere in any one hour period from any new process emission unit, either alone or in combination with the emission of particulate matter from all other similar process emission units for which construction or modification commenced on or after April 14, 1972, at a source or premises, exceeds the allowable emission rates specified in subsection (c) of 35 IAC 212.321 (See also Attachment 2) [35 IAC 212.321(a)].

- d. The affected chemical manufacturing processes are subject to 35 IAC 214 Subpart K, which provides that:
 - i. No person shall cause or allow the emission of sulfur dioxide into the atmosphere from any process emission source to exceed 2000 ppm [35 IAC 214.301]; and
 - ii. No person using sulfuric acid shall cause or allow the emission of sulfuric acid and/or sulfur trioxide from all other similar

emission sources at a plant or premises to exceed:

- A. 45.4 grams in any one hour period for sulfuric acid usage less than 1180 Mg/yr (100 percent acid basis) (0.1 lbs/hr up to 1300 T/yr) [35 IAC 214.303(a)];
- B. 250 grams per metric ton of acid used for sulfuric acid usage greater than or equal to 1180 Mg/yr (100 percent acid basis) (0.5 lbs/T over 1300 T/yr) [35 IAC 214.303(b)].

7.2.4 Non-Applicability of Regulations of Concern

- a. This permit is issued based on the affected chemical manufacturing processes not being subject to 35 IAC 218 Subpart V, because the source does not meet the applicability criteria in 35 IAC 218.500.
- b. This permit is issued based on the affected chemical manufacturing processes not being subject to control requirements of 35 IAC 218.966 because no limits under 35 IAC 218 Subpart RR shall apply to emission units with emissions of VOM to the atmosphere less than or equal to 0.91 Mg (1.0 ton) per calendar year if the total emissions from such emission units not complying with 35 IAC 218.966 does not exceed 4.5 Mg (5.0 tons) per calendar year [35 IAC 218.980(d)].

7.2.5 Operational And Production Limits and Work Practices

a. Operation of the affected chemical manufacturing processes shall not exceed the following limits:

| | Production | n Rate |
|---------------|------------|----------------|
| Emission Unit | Ton/Mo | Ton/Yr |
| PLNT_901 | 555 | 6 , 658 |
| PLT_2800 | 31 | 372 |

b. The Permittee shall follow good operating practices for the HCl absorber and dust scrubbers, including periodic inspection, routine maintenance and prompt repair of defects.

7.2.6 Emission Limitations

In addition to Condition 5.2.2 and the source wide emission limitations in Condition 5.5, the affected chemical manufacturing processes are subject to the following:

a. This permit is issued based on VOM emissions from the affected chemical manufacturing processes listed in Condition 7.2.2 not exceeding 1.0 tons per year from each emission unit and VOM emissions not exceeding 5.0 tons per year from all emission units at this source not complying with 35 IAC 218.966.

Compliance with annual limits shall be determined on a calendar year basis from the sum of the data for each month in the current year [T1N].

The above limitations are being established in this permit. These limits ensure that the affected chemical manufacturing processes are not subject to the control requirements of 35 IAC Part 218, Subpart RR, Miscellaneous Organic Chemical Manufacturing Processes [T1N].

b. Emissions of HCl from RX_401 shall not exceed the following 4.3 tons per year. This limit is based on the maximum hourly emission rate and the maximum hours of operation.

Compliance with annual limits shall be determined on a monthly basis from the sum of the data for the current month plus the preceding 11 months (running 12 month total). The above limitations contain revisions to previously issued established in Permit 73110008 [T1R].

c. Emissions from the affected chemical manufacturing processes shall not exceed the following limits:

| Emission | VOM Emi | ssions |
|-------------|-----------------|----------|
| <u>Unit</u> | <u>Lb/Month</u> | Ton/Year |
| DT.17 | 1.00 | 1 00 |
| PLNT_901 | 166 | 1.00 |
| PLT_2800 | <u> 167</u> | 1.00 |
| TOTAL | 333 | 2.00 |

These limits are based on the maximum production rate limits in Condition 7.2.5 and emission factors listed in Condition 7.2.12.

Compliance with annual limits shall be determined on a monthly basis from the sum of the data for the current month plus the preceding 11 months (running 12 month total) [T1R].

The above limitations contain revisions to previously issued Permits 95110012 and 98030070. The source has requested that the Illinois EPA establish conditions in this permit that allow various refinements from the conditions of this aforementioned permit,

consistent with the information provided in the CAAPP application. The source has requested these revisions and has addressed the applicability and compliance of Title I of the CAA, specifically 35 IAC Part 203, Major Stationary Sources Construction and Modification and/or 40 CFR 52.21, Prevention of Significant Deterioration (PSD). These limits continue to ensure that the construction and/or modification addressed in this permit does not constitute a new major source or major modification pursuant to these rules. These limits are the primary enforcement mechanism for the equipment and activities permitted in this permit and the information in the CAAPP application contains the most current and accurate information for the source. Specifically, the individual emission limits for materials used in PLT 2800 were combined into a single emission limit. In addition, the annual emission limit for PLNT 901 was decreased by 0.21 ton per year and the annual emission limit for PLT 2800 was increased by 0.27 ton per year [T1R].

d. This permit is issued based on negligible emissions of PM from the Pigment Dispersion Process (PLT_2800) and RX_1702. For this purpose, emissions from each process shall not exceed nominal emission rates of 0.1 pound per hour and 0.44 ton per year.

Compliance with annual limits shall be determined on a monthly basis from the sum of the data for the current month plus the preceding 11 months (running 12 month total). The above limitations were established in Permit 98030070 [T1].

7.2.7 Testing Requirements

None

7.2.8 Monitoring Requirements

The Permittee shall, at a minimum, perform quarterly inspections of the control equipment for the affected chemical manufacturing processes to ensure proper operation (e.g., scrubbant or absorbent flow rate at or above the minimum flow rate necessary to achieve the control efficiency reflected in the source's emission factors).

7.2.9 Recordkeeping Requirements

In addition to the records required by Condition 5.6, the Permittee shall maintain records of the following items for the affected chemical manufacturing processes to

demonstrate compliance with Conditions 5.5.1, 7.2.5, and 7.2.6, pursuant to Section 39.5(7) (b) of the Act:

- a. Records of operation and emissions of each chemical manufacturing process, including the following:
 - Types and quantities of raw materials used in the PLT_2800 process, lb/month and ton/year;
 - ii. Types and quantities of products produced in the PLNT 901 process, lb/month and ton/year;
 - iii. The number of batches begun;
 - iv. The process weight rate (ton/hr) for each affected chemical manufacturing process, to determine the emission limit indicated by Condition 7.2.3(c); and
 - v. The aggregate monthly and annual VOM, PM, HCl, SO_2 , and sulfuric acid emissions from the affected chemical manufacturing processes based on the material and solvent usage and control device efficiencies, with supporting calculations.
- b. Records of the composite partial vapor pressure for materials used as cleaning solvents in the Pigment Dispersion Process.
- c. Records addressing use of good operating practices for the control equipment (absorber and scrubbers):
 - i. Records for periodic inspection of the control equipment with date, individual performing the inspection, and nature of inspection; and
 - ii. Records for prompt repair of defects, with identification and description of defect, effect on emissions, date identified, date repaired, and nature of repair.
- d. The Permittee shall keep records of the total VOM emissions from all emission units which are exempt from the requirements of 35 IAC 218, Subpart RR, including Scenario 3 for equipment identified in Section 7.1 of this permit.
- e. Documentation, including all detailed calculations, indicating development of emission factors and control device efficiencies used to determine emissions.

7.2.10 Reporting Requirements

The Permittee shall promptly notify the Illinois EPA, Compliance Section, of deviations of an affected chemical manufacturing process with the permit requirements as follows, pursuant to Section 39.5(7)(f)(ii) of the Act. Reports shall describe the probable cause of such deviations, and any corrective actions or preventive measures taken:

- a. The Permittee shall promptly notify the Illinois EPA of emissions of VOM, PM, or sulfuric acid from the affected process in excess of the limits specified in Condition 7.2.3, within 30 days of such an occurrence.
- b. Reports of Deviations

If there is an exceedance of the requirements of this permit as determined by the records required by this permit, the Permittee shall submit a report to the Illinois EPA's Compliance Section in Springfield, Illinois, within 30 days after the exceedance. The report shall include the emissions released in accordance with the recordkeeping requirements, a copy of the relevant records, and a description of the exceedance or violation and efforts to reduce emissions and future occurrences [Section 39.5(7)(f)(ii) of the Act.

- c. Upon request by the Illinois EPA, the owner or operator of an emission unit which is exempt from the requirements of 35 IAC 218, Subpart RR shall submit records to the Illinois EPA within 30 calendar days from the date of the request that document that the emission unit is exempt from those requirements [35 IAC 218.990].
- 7.2.11 Operational Flexibility/Anticipated Operating Scenarios

7.2.12 Compliance Procedures

N/A

a. To determine compliance with Conditions 5.5.1, 7.2.3, and 7.2.6, emissions from the affected organic chemical manufacturing processes shall be calculated using the appropriate operating records and emissions factors recorded pursuant to Condition 7.2.9 or the following emission factors:

| Emission Unit | Pollutant | Controlled Emission Factor |
|---------------|-----------|----------------------------|
| RX 311 | MOV | 0.33 lb/batch |

| RX_401 | VOM | 0.0162 lb/batch | |
|----------|--------|----------------------------|--|
| | SO_2 | 1.59 lb/batch | |
| | HCl | 2.4 lb/batch (PCD_401) | |
| | HCl | 24.09 lb/batch (PCD_402) | |
| PLNT_901 | VOM | 0.1832 lb/hr | |
| PLT_2800 | MOV | 0.2582 lb/ton ester | |
| | VOM | 20 lb/ton performance | |
| | | additive | |
| | MOV | 30% of cleaning solvent | |
| | | usage (less than 10 mmHg*) | |
| | MOV | 100% of cleaning solvent | |
| | | usage (greater than or | |
| | | equal to 10 mmHg*) | |
| RX_1702 | MOV | 16 lb/batch | |

^{*} This figure refers to the VOM composite partial vapor pressure at 20 $^{\circ}\text{C}$

7.3 Units - Inorganic Chemical Manufacturing Processes Control - Acid/Dust Scrubbers

7.3.1 Description

PLNT 601 Process

This inorganic salt manufacturing process include a spray dryer, pulverizer, classifier, dust scrubber, classifier baghouse filter, product cyclones, dehumidification system, hoppers, and a redissolve tank. These process convert inorganic salt solution into dry powder through drying, pulverizing, and classifying by size. The powder is drummed and stored for eventual transport to other facilities for processing into consumer product.

The Powder Plant generates PM emissions which are controlled by a dust scrubber, baghouse filter, and a redissolve tank. The dust scrubber and the baghouse filter collect PM emissions and recycles them back into the process. The redissolve tank controls the fine PM from the process, dissolving them in water and recycles them at the first stage of the process. The dehumidification system supplies process air for material handling. During operation of the dehumidifying concentrator, VOM emissions are generated.

RX 501 Process

The PAGO process is used to manufacture bulk dye which is shipped off-site to other facilities for processing into consumer products. The main part of the PAGO Process consists of a reactor (RX_501), settling tanks, neutralization tanks, and an acid scrubber. The second part of the process dries and drums the product. Operations consist of a precipitator, centrifuge, dryer, wastewater treatment equipment, and a dust scrubber.

Emissions from the main part of the process are vented to an acid scrubber to reduce all acid and particulate emissions. Emissions from the second part of the process, consisting of mainly particulate matter, are vented to a dust scrubber.

RX 301 Process

The process includes a pre-mix tank, a 2,000-gallon reactor (RX_301), and a product filter system. The reactor is used to manufacture inorganic salt solutions. The bulk raw material is stored for use in other processes at this facility or shipped off-site. For certain batches, a Venturi scrubber is used to control hydrogen chloride vapors.

RX-201 Process

This process consists of a 2,000-gallon reactor (RX $_2$ 01). The reactor is used for simple blending of chemical

intermediates or to facilitate an acid-base reaction to produce inorganic salt solutions. These products are either drummed for shipment or stored for use as raw materials in some of the other products.

RX 101 Process

This process consists of a 3,000-gallon reactor (RX_101). The reactor is used to dissolve inorganic acid salts or to facilitate a replacement reaction to produce inorganic salts. These products are either drummed for shipment or stored for use as raw materials in other products. For certain batches, a Venturi scrubber is used to control hydrogen chloride vapors.

7.3.2 List of Emission Units and Air Pollution Control Equipment

| Emission | | Emission |
|----------|---------------------------------------|-------------------------|
| Unit | Description | Control |
| | | Equipment |
| PLNT_601 | PLNT_601 Process - powder | Venturi dust |
| | inorganic salt manufacturing | scrubber and |
| | (pulverizer and classifier, | separator |
| | spray dryer, dehumidifying | system |
| | concentrator, dust scrubber, | (PCD_601) |
| | and classifier baghouse | |
| D17 F01 | filter) | DV 501 ' 1 |
| RX_501 | RX_501 Process - dye | RX_501 acid |
| | manufacturing (reactor | scrubber |
| | RX_501, acid scrubber, dust | (PCD_501) and |
| | scrubber) | RX_501 dust scrubber |
| | | (PCD 502) |
| RX 301 | RX 301 Process - batch | Venturi |
| KX_301 | oxidation reaction (reactor | Scrubber |
| | RX 301) | (PCD 350) |
| RX 201 | RX 201 Process - acid-base | None |
| KX_201 | _ | None |
| | reaction or blending (reactor RX 201) | |
| RX 101 | RX 101 Process - inorganic | Venturi |
| LV_101 | acid salts (reactor RX 101) | Scrubber |
| | actu sates (reactor RA_101) | (PCD 350) |
| | | (100_330) |

7.3.3 Applicability Provisions and Applicable Regulations

- a. The "affected inorganic chemical manufacturing process" for the purpose of these unit-specific conditions, are the emission units used to produce various inorganic chemicals, as listed in Condition 7.3.2.
- b. The affected inorganic chemical manufacturing processes are subject to 35 IAC 218.301, which provides that:

No person shall cause or allow the discharge of more than 3.6 kg/hr (8 lb/hr) of organic material into the atmosphere from any emission unit, except as provided in 35 IAC 218.302 and the following exception: If no odor nuisance exists the limitation of 35 IAC 218 Subpart G shall apply only to photochemically reactive material [35 IAC 218.301].

c. The affected inorganic chemical manufacturing processes are subject to 35 IAC 212.321, which provides that:

No person shall cause or allow the emission of particulate matter into the atmosphere in any one hour period from any new process emission unit, either alone or in combination with the emission of particulate matter from all other similar process emission units for which construction or modification commenced on or after April 14, 1972, at a source or premises, exceeds the allowable emission rates specified in subsection (c) of 35 IAC 212.321 (See also Attachment 2) [35 IAC 212.321(a)].

- d. The affected inorganic chemical manufacturing processes are subject to 35 IAC 214 Subpart K, which provides that:
 - i. No person shall cause or allow the emission of sulfur dioxide into the atmosphere from any process emission source to exceed 2000 ppm [35 IAC 214.301]; and
 - ii. No person using sulfuric acid shall cause or allow the emission of sulfuric acid and/or sulfur trioxide from all other similar emission sources at a plant or premises to exceed:
 - A. 45.4 grams in any one hour period for sulfuric acid usage less than 1180 Mg/yr (100 percent acid basis) (0.1 lbs/hr up to 1300 T/yr) [35 IAC 214.303(a)];
 - B. 250 grams per metric ton of acid used for sulfuric acid usage greater than or equal to 1180 Mg/yr (100 percent acid basis) (0.5 lbs/T over 1300 T/yr) [35 IAC 214.303(b)].
- 7.3.4 Non-Applicability of Regulations of Concern
 - a. This permit is issued based on the affected inorganic chemical manufacturing processes not being subject to 35 IAC Part 218, Subpart V: Batch Operations, because

the affected chemical manufacturing units which meet the applicability criteria of 35 IAC 218.500(a) are considered to be de minimis emission units which are exempt from these control requirements pursuant to 35 IAC 218.500(c). However, there are certain recordkeeping and reporting requirements for the affected inorganic chemical manufacturing processes pursuant to 35 IAC Part 218, Subpart V, included in Conditions 7.3.9 and 7.3.10.

- b. This permit is issued based on the affected inorganic chemical manufacturing processes not being subject to the control requirements of 35 IAC 218.966 because the VOM emissions generated by the affected inorganic chemical manufacturing processes are not from miscellaneous organic chemical manufacturing processes. The VOM emissions are generated during operation of the dehumidifying concentrator.
- 7.3.5 Operational And Production Limits And Work Practices

The Permittee shall follow good operating practices for the Venturi scrubbers, acid scrubber, and dust scrubber, including periodic inspection, routine maintenance and prompt repair of defects.

7.3.6 Emission Limitations

In addition to Condition 5.2.2 and the source wide emission limitations in Condition 5.5, the affected inorganic chemical manufacturing processes are subject to the following:

Emissions of particulate matter from the affected inorganic chemical manufacturing processes shall not exceed the following limits:

| Emission | | Emissions | | |
|-----------------|-----------|--------------|--------|--|
| <u>Unit</u> | Pollutant | <u>Lb/Hr</u> | Ton/Yr | |
| | | | | |
| RX_501 | PM | 1.49 | 4.50 | |
| RX 101, RX 201, | PM | 8.72 | 9.48 | |
| and RX 301 | | | | |
| PLNT 601 | PM | _ | 10.00 | |
| Total | | | 23.98 | |

These limits are based on the maximum allowable emissions of PM as stated in Condition 7.3.3(c) for RX_101. For all other emission units, these limit are based on maximum hourly emission rates, emission factors listed in Condition 7.3.12, and the maximum hours of operation.

Compliance with annual limits shall be determined on a monthly basis from the sum of the data for the current month plus the preceding 11 months (running 12 month total) [T1R].

The above limitations contain revisions to previously issued Permits 74080142, 80120010, and 99100024. The source has requested that the Illinois EPA establish conditions in this permit that allow various refinements from the conditions of this aforementioned permit, consistent with the information provided in the CAAPP application. The source has requested these revisions and has addressed the applicability and compliance of Title I of the CAA, specifically 35 IAC Part 203, Major Stationary Sources Construction and Modification and/or 40 CFR 52.21, Prevention of Significant Deterioration (PSD). These limits continue to ensure that the construction and/or modification addressed in this permit does not constitute a new major source or major modification pursuant to these rules. These limits are the primary enforcement mechanism for the equipment and activities permitted in this permit and the information in the CAAPP application contains the most current and accurate information for the source. Specifically, emission limits for RX 501 were increased by 4.06 tons per year, emissions limits for RX 101, RX 201, and RX 301 were combined into one limit and decreased by 13.81 tons per year, and additional emission limits for PLNT 601 were added [T1R].

b. Emissions of volatile organic material from PLNT_601 shall not exceed 0.77 ton per month and 2.0 tons per year. These limits are based on maximum hourly emission rates for dehumidifying concentrator usage, emission factors listed in Condition 7.3.12, and the maximum hours of operation.

Compliance with annual limits shall be determined on a monthly basis from the sum of the data for the current month plus the preceding 11 months (running 12 month total). The above limitations were established in Permit 83110056 [T1].

c. Emissions of other pollutants from the affected inorganic chemical manufacturing processes shall not exceed the following limits:

| Emission | | Emissions | |
|-------------------------------|------------------------------------|--------------|---------------|
| <u>Unit</u> | Pollutant | <u>Lb/Hr</u> | <u>Ton/Yr</u> |
| RX_501 | Sulfuric Acid / Sulfur Trioxide | 0.1 | 0.44 |
| RX_101, RX_201, and RX_301 | HCl | - | 3.86 |

These limits are based on the maximum allowable emissions of sulfuric acid/sulfur trioxide as stated in Condition 7.3.3(d). For all other pollutants and emission units, these limit are based on maximum hourly emission rates, emission factors listed in Condition 7.3.12, and the maximum hours of operation.

Compliance with annual limits shall be determined on a monthly basis from the sum of the data for the current month plus the preceding 11 months (running 12 month total). The above limitations contain revisions to previously issued Permits 74080142, 82120049, and 99100024. Specifically, the annual limit for RX_501 was increased by 0.04 tons per year and the annual limits for RX_101, RX_201, and RX_301 were combined into one limit and increased by 3.12 tons per year [T1R].

7.3.7 Testing Requirements

None

7.3.8 Monitoring Requirements

The Permittee shall, at a minimum, perform quarterly inspections of the control equipment for the affected chemical manufacturing processes to ensure proper operation (e.g., scrubbant or absorbent flow rate at or above the minimum flow rate necessary to achieve the control efficiency reflected in the source's emission factors).

7.3.9 Recordkeeping Requirements

In addition to the records required by Condition 5.6, the Permittee shall maintain records of the following items for the affected inorganic chemical manufacturing processes to demonstrate compliance with Conditions 5.5.1, 7.3.5, and 7.3.6, pursuant to Section 39.5(7)(b) of the Act:

a. The Permittee shall keep records of the uncontrolled total annual mass emissions for any de minimis single unit operation or batch process train, as applicable, and documentation verifying these values or measurements. The documentation shall include the engineering calculations, any measurements made in accordance with 35 IAC 218.503, and the potential or permitted number of batch cycles per year, or, in the alternative, total production as represented in the source's operating permit [35 IAC 218.505(a)].

- b. Records of operation and emissions of each chemical manufacturing process, including the following:
 - Types and quantities of dry raw materials used in the RX_301 and RX_201 processes, lb/month and ton/year;
 - ii. Types and quantities of dehumidifying agent
 used in PLNT_601 process, lb/month and
 ton/year;
 - iii. The number of batches begun;
 - iv. The process weight rate (ton/hr) for each affected inorganic chemical manufacturing process, to determine the emission limit indicated by Condition 7.3.3(c); and
 - v. The aggregate monthly and annual VOM, PM, HCl, SO_2 , and sulfuric acid emissions from the affected inorganic chemical manufacturing processes based on the material and solvent usage and control device efficiencies, with supporting calculations.
- c. The following information on PAGO process control device operation:
 - i. Parameters being monitored (e.g., pressure drop across the dust scrubber, pH of the acid scrubber scrubbant, and scrubbant flow rate of the acid scrubber) to ensure that both the scrubbers (PCD_501 and PCD_502) are achieving the control efficiency used in emissions calculations (see Condition 7.3.12); and
 - ii. Operation and Maintenance manual prepared by the Permittee or provided by the manufacturer to ensure proper maintenance of both the scrubbers (PCD_501 and PCD_502).
- d. Records addressing use of good operating practices for the control equipment (scrubbers):
 - i. Records for periodic inspection of the control equipment with date, individual performing the inspection, and nature of inspection; and
 - ii. Records for prompt repair of defects, with identification and description of defect, effect on emissions, date identified, date repaired, and nature of repair.

e. Documentation, including all detailed calculations, indicating development of emission factors and control device efficiencies used to determine emissions.

7.3.10 Reporting Requirements

The Permittee shall promptly notify the Illinois EPA, Compliance Section, of deviations of an affected inorganic chemical manufacturing process with the permit requirements as follows, pursuant to Section 39.5(7)(f)(ii) of the Act. Reports shall describe the probable cause of such deviations, and any corrective actions or preventive measures taken:

- a. The owner or operator of a de minimis single unit operation or batch process train exempt from the control requirements due to 35 IAC 218.500(c) shall notify the Illinois EPA in writing if the uncontrolled total annual mass emissions from such de minimis single unit operation or batch process train exceed the threshold in 35 IAC 218.500(c)(1) or (2), respectively, within 60 days after the event occurs. Such notification shall include a copy of all records of such event [35 IAC 218.505(g)].
- b. The Permittee shall promptly notify the Illinois EPA of emissions of VOM, PM, or sulfuric acid from the affected inorganic chemical manufacturing process in excess of the limits specified in Conditions 7.3.3 and/or 7.3.6, within 30 days of such an occurrence.
- c. Reports of Deviations

If there is an exceedance of the requirements of this permit as determined by the records required by this permit, the Permittee shall submit a report to the Illinois EPA's Compliance Section in Springfield, Illinois, within 30 days after the exceedance. The report shall include the emissions released in accordance with the recordkeeping requirements, a copy of the relevant records, and a description of the exceedance or violation and efforts to reduce emissions and future occurrences [Section 39.5(7)(f)(ii) of the Act.

7.3.11 Operational Flexibility/Anticipated Operating Scenarios

N/A

7.3.12 Compliance Procedures

a. To determine compliance with Conditions 5.5.1, 7.3.3, and 7.3.6, emissions from all other affected

inorganic chemical manufacturing processes shall be calculated using the appropriate operating records and emissions factors recorded pursuant to Condition 7.3.9 or the following emission factors:

| Emissic | on Unit | | <u>Pollutant</u> | Emission Factor (including control when necessary) |
|--------------------|-----------|----|------------------------|--|
| PLNT_60 PLNT_60 | | | PM VOM | 39.4 lb/batch 100% of dehumidifying agent usage |
| RX_501 RX_501 | | | PM sulfuric acid | 4.96 lb/batch 0.26 lb/batch |
| RX_301 | (scenario | 1) | PM | 1.8 lb/batch or 2 lb/ton dry material |
| RX 301 | (scenario | 1) | HCl | 0.33 lb/batch |
| RX_301 | (scenario | 2) | PM | 3.0 lb/ batch or 2 lb/ton dry material |
| RX 301 | (scenario | 2) | HCl | 2.57 lb/batch |
| RX_201 | | | PM | 1.5 lb/ton dry material |
| RX_201 | | | HCl | 4.78 lb/batch |
| | (scenario | | PM | 10 lb/batch |
| RX_101 | (scenario | 1) | HCl | 0.11 lb/batch |
| RX_101 | (scenario | 2) | PM | 5.25 lb/batch or 2 lb/ton dry material |
| RX_101 | (scenario | 2) | HCl | 3.82 lb/batch |

Emissions (lb) = Operating Rate (e.g., batches) *
Emission Factor (e.g., lb/batch)

b. To determine compliance with the emission limits in Condition 5.5.1, emissions attributable to fuel combustion in the affected inorganic chemical manufacturing processes shall be based on the recordkeeping requirements in Condition 7.3.9 and the emission factors and formulas listed below:

| D-11 | Emission Factor |
|------------------|--------------------------|
| <u>Pollutant</u> | $(1b/10^6 \text{ ft}^3)$ |
| PM | 7.6 |
| SO_2 | 0.6 |
| VOM | 5.5 |
| NO_x | 100.0 |
| CO | 84.0 |

These are the emission factors for uncontrolled natural gas combustion in small boilers (<100 mmBtu/hr), Tables 1.4-1 and 1.4-2, AP-42, Volume I, Supplement D, March 1998.

Boiler Emissions (lb) = natural gas consumed (ft 3) multiplied by the appropriate emission factor.

7.4 Fuel Combustion Equipment

7.4.1 Description

These boilers produce steam and heat for the various processes at this source. These boilers each have a maximum design heat input capacity of 14.7 mmBtu/hr, combust only natural gas, and were constructed in 1995.

7.4.2 List of Emission Units and Pollution Control Equipment

| Emission | | Rated Capacity |
|----------|------------------------------|----------------|
| Unit | Description | (mmBtu/hr) |
| во 1 | Industrial natural gas fired | 14.7 |
| _ | boiler (14.7 mmBtu/hr) | |
| во 2 | Industrial natural gas fired | 14.7 |
| _ | boiler (14.7 mmBtu/hr) | |

7.4.3 Applicability Provisions and Applicable Regulations

- a. An "affected boiler" for the purpose of these unit specific conditions is a steam generating unit that is listed in Condition 7.4.2.
- b. The emission of carbon monoxide (CO) into the atmosphere from each affected boiler with actual heat input greater than 2.9 MW (10 mmBtu/hr) shall not exceed 200 ppm, corrected to 50 percent excess air. [35 IAC 216.121]
- c. Each affected boiler is subject to NSPS, 40 CFR 60 Subpart Dc, Small Industrial-Commercial-Institutional Steam Generating Units because each boiler was constructed after the applicable date of June 9, 1989, and each boiler has a design heat input greater than 10 mmBtu/hr.
- d. Each affected boiler is also subject to the opacity limits identified in Condition 5.2.2(b).

7.4.4 Non-Applicability of Regulations of Concern

- a. Each affected boiler is not subject to 35 IAC 217.141, because the actual heat input of each affected boiler is less than 73.2 MW (250 mmBtu/hr).
- b. Pursuant to 35 IAC 218.303, each affected boiler, i.e., fuel combustion emission unit, is not subject to 35 IAC 218.301, Use of Organic Material.
- c. There are no applicable requirements for particulate matter or sulfur dioxide for affected boilers firing natural gas.

d. This permit is issued based on each affected boiler not being subject to 40 CFR Part 64, Compliance Assurance Monitoring (CAM) for Major Stationary Sources, because each affected boiler does not use an add-on control device to achieve compliance with an emission limitation or standard and does not have potential emissions of the applicable regulated air pollutant that equals or exceeds major source threshold levels.

7.4.5 Operational And Production Limits And Work Practices

- a. Operation of the affected boilers is allowed with natural gas or another gaseous fuel provided the emission limits of Condition 5.5.1 are not exceeded.
- b. At all times, the Permittee shall, to the extent practicable, maintain and operate each affected boiler in a manner consistent with good air pollution control practice for minimizing emissions.

7.4.6 Emission Limitations

In addition to Condition 5.2.2 and the source wide emission limitations in Condition 5.5, the affected boilers are subject to the following:

a. Emissions from each affected boiler shall not exceed the following limits:

| | Pollutant | Emissions |
|-----------|-----------|-----------|
| Pollutant | Lb/Hr | Ton/Year |
| | | |
| NO_x | 2.00 | 9.0 |
| CO | 1.23 | 5.41 |

These limits are based on the maximum natural gas usage and standard AP-42 emission factors for small industrial boilers.

Compliance with annual limits shall be determined on a monthly basis from the sum of the data for the current month plus the preceding 11 months (running 12 month total) [T1R].

The above limitations contain revisions to previously issued Permit 95010022. The source has requested that the Illinois EPA establish conditions in this permit that allow various refinements from the conditions of this aforementioned permit, consistent with the information provided in the CAAPP application. The source has requested these revisions and has addressed the applicability and compliance of Title I of the CAA, specifically 35 IAC

Part 203, Major Stationary Sources Construction and Modification and/or 40 CFR 52.21, Prevention of Significant Deterioration (PSD). These limits continue to ensure that the construction and/or modification addressed in this permit does not constitute a new major source or major modification pursuant to these rules. These limits are the primary enforcement mechanism for the equipment and activities permitted in this permit and the information in the CAAPP application contains the most current and accurate information for the source. Specifically, the CO emission limits were increased from 0.5 lb/hr and 2.3 ton/yr to 1.23 lb/hr and 5.41 ton/yr as a result of revised emission factors [T1R].

7.4.7 Testing Requirements

None

7.4.8 Monitoring Requirements

None

7.4.9 Recordkeeping Requirements

In addition to the records required by Condition 5.6, the Permittee shall maintain records of the following items for each affected boiler to demonstrate compliance with Conditions 5.5.1 and 7.4.6, pursuant to Section 39.5(7)(b) of the Act:

- a. Monthly and annual natural gas usage in the affected boilers ($ft^3/month$ and $ft^3/year$); and
- b. Annual aggregate NO_x , CO, PM, SO_2 , and VOM emissions from each affected boiler, based on fuel consumption and the applicable emission factors, with supporting calculations.
- c. All the records required pursuant to 40 CFR 60.7 and 60.48c for the affected boilers, including total natural gas usage (ft³/day) [40 CFR 60.48c(g)];

7.4.10 Reporting Requirements

The Permittee shall promptly notify the Illinois EPA, Compliance Section of deviations of the affected boilers with the permit requirements as follows, pursuant to Section 39.5(7)(f)(ii) of the Act. Reports shall describe the probable cause of such deviations, and any corrective actions or preventive measures taken:

- a. Notification within 60 days of operation of an affected boiler that may not have been in compliance with the opacity limitations in Condition 5.5.2(b), with a copy of such record for each incident.
- b. Emissions of NO_x , CO, PM, SO_2 , or VOM from the affected boilers in excess of the limits specified in Condition 5.5.1 or Condition 7.4.6, within 30 days of such an occurrence.
- 7.4.11 Operational Flexibility/Anticipated Operating Scenarios $$\mathrm{N/A}$$

7.4.12 Compliance Procedures

- a. Compliance with Condition 7.4.3(b), (c), and (d) is demonstrated under inherent operating conditions of an affected boiler, so that no compliance procedures are set in this permit addressing this requirement.
- b. Compliance with the emission limits in Condition 5.5.1 shall be based on the recordkeeping requirements in Condition 7.4.9 and the emission factors and formulas listed below:

| <u>Pollutant</u> | Emission Factor (lb/10 ⁶ ft ³) |
|------------------|---|
| PM | 7.6 |
| SO_2 | 0.6 |
| VOM | 5.5 |
| NO_x | 100.0 |
| CO | 84.0 |

These are the emission factors for uncontrolled natural gas combustion in small boilers (<100 mmBtu/hr), Tables 1.4-1 and 1.4-2, AP-42, Volume I, Supplement D, March 1998.

Boiler Emissions (lb) = natural gas consumed (ft^3) multiplied by the appropriate emission factor.

7.5 Storage Tanks

7.5.1 Description

The Permittee operates fixed roof storage tanks to store materials used or produced in the chemical manufacturing processes at this source. Permanent submerged loading is used at Tanks STK 1413 and STK 1409, minimizing turbulence and evaporation emissions during loading.

Tanks STK 1413 and STK 1409 store hydrochloric acid and chlorosulfonic acid, respectively, which are both non-VOM and inorganic materials. Hydrochloric acid is a hazardous air pollutant.

7.5.2 List of Emission Equipment and Pollution Control Equipment

| Storage Tank | Description | Emission Control Equipment |
|--------------|--|----------------------------------|
| STK 1413 | 11,183 gallon fixed roof aboveground hydrochloric acid | None |
| | storage tank | |
| STK 1409 | 5,000 gallon fixed roof aboveground chlorosulfonic acid storage tank | None |

7.5.3 Applicability Provisions

An "affected storage tank," for the purpose of these unitspecific conditions, is a storage tank that has a capacity of less than or equal to 40,000 gallons which stores inorganic material, as identified in Condition 7.5.2.

7.5.4 Non-Applicable Regulations

- a. Each affected storage tank is not subject to 35 IAC 218 Subpart B: Organic Emissions from Storage and Loading Operations (except 35 IAC 218.122(b) and 35 IAC 218.129(f)), because each tank has a capacity of less than 40,000 gallons and does not store volatile organic liquids.
- b. Each affected storage tank is not subject to the requirements of 40 CFR 60, Subpart Kb, because each tank has a storage capacity less than 40 $\rm m^3$ (10,567 gallons) and does not store volatile organic liquids.
- c. Each affected storage tank is not subject to 35 IAC Part 218 because these storage tanks do not store organic material. If the material stored in these tanks changes to an organic material, then these tanks will be subject to 35 IAC 218.122(b) and 35 IAC 218.129(f).

- d. This permit is issued based on each affected storage tank not being subject to 40 CFR Part 64, Compliance Assurance Monitoring (CAM) for Major Stationary Sources, because each affected storage tank does not use an add-on control device to achieve compliance with an emission limitation or standard and does not have potential emissions of the applicable regulated air pollutant that equals or exceeds major source threshold levels.
- 7.5.5 Operational And Production Limits And Work Practices

None

7.5.6 Emission Limitations

There are no specific emission limitations for this unit, however, there are source wide emission limitations in Condition 5.5 that include this unit.

7.5.7 Testing Requirements

None

7.5.8 Inspection Requirements

None

7.5.9 Recordkeeping Requirements

The Permittee shall maintain records of the following items for each affected storage tank to demonstrate compliance with Conditions 5.5.1, 7.5.3, and 7.5.7 pursuant to Section 39.5(7) (b) of the Act:

- a. The Permittee shall maintain the identification and properties of each material stored at the source, as related to emissions, e.g., vapor pressure and molecular weight.
- c. The Permittee shall maintain records of the monthly throughput of each material through each tank or group of tanks.

7.5.10 Reporting Requirements

The Permittee shall promptly notify the Illinois EPA, Compliance Section of deviations with the operating requirements as follows pursuant to Section 39.5(7)(f)(ii) of the Act:

Any loading of organic liquid with a true vapor pressure greater than or equal to 17.24 kPa (2.5

psia) in an affected storage tank without usage of a permanent submerged loading pipe or an equivalent device approved by the Illinois EPA. This notification shall include a description of the event, the cause for the non-compliance, actions taken to correct the non-compliance, and the steps taken to avoid future non-compliance.

7.5.11 Operational Flexibility/Anticipated Operating Scenarios

The Permittee is authorized to make the following physical or operational change with respect to an affected storage tank without prior notification to the Illinois EPA or revision of this permit. This condition does not affect the Permittee's obligation to properly obtain a construction permit in a timely manner for any activity constituting construction or modification of the source, as defined in 35 IAC 201.102:

Changes in the material stored in a tank, provided the tank continues to comply with the Conditions in Section 7.5 of this permit and the change in materials does not require a physical change to the tank.

7.5.12 Compliance Procedures

- a. Compliance with the requirements in Condition 7.5.5 shall be determined by the recordkeeping and reporting requirements in Condition 7.5.9 and 7.5.10.
- b. Emissions of VOM and HCl from each affected storage tank shall be determined through the use of the current version of the USEPA TANKS program, AP-42 emission factors, or other appropriate engineering estimates.

8.0 GENERAL PERMIT CONDITIONS

8.1 Permit Shield

Pursuant to Section 39.5(7)(j) of the Act, the Permittee has requested and has been granted a permit shield. This permit shield provides that compliance with the conditions of this permit shall be deemed compliance with applicable requirements which were applicable as of the date the proposed permit for this source was issued, provided that either the applicable requirements are specifically identified within this permit, or the Illinois EPA, in acting on this permit application, has determined that other requirements specifically identified are not applicable to this source and this determination (or a concise summary thereof) is included in this permit.

This permit shield does not extend to applicable requirements which are promulgated after August 9, 2001 (the date of issuance of the draft permit) unless this permit has been modified to reflect such new requirements.

8.2 Applicability of Title IV Requirements (Acid Deposition Control)

This source is not an affected source under Title IV of the CAA and is not subject to requirements pursuant to Title IV of the CAA.

8.3 Emissions Trading Programs

No permit revision shall be required for increases in emissions allowed under any USEPA approved economic incentives, marketable permits, emissions trading, and other similar programs or processes for changes that are provided for elsewhere in this permit and that are authorized by the applicable requirement [Section 39.5(7)(o)(vii) of the Act].

As of the date of issuance of this permit, there are no such economic incentive, marketable permit or emission trading programs applicable to this source that have been approved by USEPA.

- 8.4 Operational Flexibility/Anticipated Operating Scenarios
 - 8.4.1 Changes Specifically Addressed by Permit

Physical or operational changes specifically addressed by the Conditions of this permit that have been identified as not requiring Illinois EPA notification may be implemented without prior notice to the Illinois EPA.

8.4.2 Changes Requiring Prior Notification

The Permittee is authorized to make physical or operational changes that contravene express permit terms

without applying for or obtaining an amendment to this permit, provided that [Section 39.5(12)(a)(i) of the Actl:

- a. The changes do not violate applicable requirements;
- b. The changes do not contravene federally enforceable permit terms or conditions that are monitoring (including test methods), recordkeeping, reporting, or compliance certification requirements;
- c. The changes do not constitute a modification under Title I of the CAA;
- d. Emissions will not exceed the emissions allowed under this permit following implementation of the physical or operational change; and
- e. The Permittee provides written notice to the Illinois EPA, Division of Air Pollution Control, Permit Section, at least 7 days before commencement of the change. This notice shall:
 - i. Describe the physical or operational change;
 - ii. Identify the schedule for implementing the physical or operational change;
 - iii. Provide a statement of whether or not any New Source Performance Standard (NSPS) is applicable to the physical or operational change and the reason why the NSPS does or does not apply;
 - iv. Provide emission calculations which
 demonstrate that the physical or operational
 change will not result in a modification; and
 - v. Provide a certification that the physical or operational change will not result in emissions greater than authorized under the Conditions of this permit.

8.5 Testing Procedures

Tests conducted to measure composition of materials, efficiency of pollution control devices, emissions from process or control equipment, or other parameters shall be conducted using standard test methods. Documentation of the test date, conditions, methodologies, calculations, and test results shall be retained pursuant to the recordkeeping procedures of this permit. Reports of any tests conducted as required by this permit or as the result of a request by the Illinois EPA shall be submitted as specified in Condition 8.6.

8.6 Reporting Requirements

8.6.1 Monitoring Reports

If monitoring is required by any applicable requirements or conditions of this permit, a report summarizing the required monitoring results, as specified in the conditions of this permit, shall be submitted to the Air Compliance Section of the Illinois EPA every six months as follows [Section 39.5(7)(f) of the Act]:

Monitoring Period

Report Due Date

January - June

September 1

July - December

March 1

All instances of deviations from permit requirements must be clearly identified in such reports. All such reports shall be certified in accordance with Condition 9.9.

8.6.2 Test Notifications

Unless otherwise specified elsewhere in this permit, a written test plan for any test required by this permit shall be submitted to the Illinois EPA for review at least 60 days prior to the testing pursuant to Section 39.5(7)(a) of the Act. The notification shall include at a minimum:

- a. The name and identification of the affected unit(s);
- b. The person(s) who will be performing sampling and analysis and their experience with similar tests;
- c. The specific conditions under which testing will be performed, including a discussion of why these conditions will be representative of maximum emissions and the means by which the operating parameters for the source and any control equipment will be determined;
- d. The specific determination of emissions and operation which are intended to be made, including sampling and monitoring locations;
- e. The test method(s) which will be used, with the specific analysis method, if the method can be used with different analysis methods;
- f. Any minor changes in standard methodology proposed to accommodate the specific circumstances of testing, with justification; and

g. Any proposed use of an alternative test method, with detailed justification.

8.6.3 Test Reports

Unless otherwise specified elsewhere in this permit, the results of any test required by this permit shall be submitted to the Illinois EPA within 60 days of completion of the testing. The test report shall include at a minimum [Section 39.5(7)(e)(i) of the Act]:

- a. The name and identification of the affected unit(s);
- b. The date and time of the sampling or measurements;
- c. The date any analyses were performed;
- d. The name of the company that performed the tests and/or analyses;
- e. The test and analytical methodologies used;
- f. The results of the tests including raw data, and/or analyses including sample calculations;
- g. The operating conditions at the time of the sampling or measurements; and
- h. The name of any relevant observers present including the testing company's representatives, any Illinois EPA or USEPA representatives, and the representatives of the source.

8.6.4 Reporting Addresses

- a. The following addresses should be utilized for the submittal of reports, notifications, and renewals:
 - i. Illinois EPA Air Compliance Section

Illinois Environmental Protection Agency Bureau of Air Compliance Section (MC 40) P.O. Box 19276 Springfield, Illinois 62794-9276

ii. Illinois EPA - Air Regional Field Office

Illinois Environmental Protection Agency Division of Air Pollution Control 9511 West Harrison Des Plaines, Illinois 60016 iii. Illinois EPA - Air Permit Section

Illinois Environmental Protection Agency Division of Air Pollution Control Permit Section (MC 11) P.O. Box 19506 Springfield, Illinois 62794-9506

iv. USEPA Region 5 - Air Branch

USEPA (AE - 17J) Air & Radiation Division 77 West Jackson Boulevard Chicago, Illinois 60604

- b. Unless otherwise specified in the particular provision of this permit, reports shall be sent to the Illinois EPA - Air Compliance Section with a copy sent to the Illinois EPA - Air Regional Field Office.
- 8.7 Obligation to Comply with Title I Requirements

Any term, condition, or requirement identified in this permit by T1, T1R, or T1N is established or revised pursuant to 35 IAC Part 203 or 40 CFR 52.21 ("Title I provisions") and incorporated into this permit pursuant to both Section 39.5 and Title I provisions. Notwithstanding the expiration date on the first page of this permit, the Title I conditions remain in effect pursuant to Title I provisions until the Illinois EPA deletes or revises them in accordance with Title I procedures.

9.0 STANDARD PERMIT CONDITIONS

9.1 Effect of Permit

- 9.1.1 The issuance of this permit does not release the Permittee from compliance with State and Federal regulations which are part of the Illinois State Implementation Plan, as well as with other applicable statutes and regulations of the United States or the State of Illinois or applicable ordinances, except as specifically stated in this permit and as allowed by law and rule [Section 39.5(7)(j)(iv) of the Act].
- 9.1.2 In particular, this permit does not alter or affect the following:
 - a. The provisions of Section 303 (emergency powers) of the CAA, including USEPA's authority under that Section;
 - b. The liability of an owner or operator of a source for any violation of applicable requirements prior to or at the time of permit issuance;
 - c. The applicable requirements of the acid rain program consistent with Section 408(a) of the CAA; and
 - d. The ability of USEPA to obtain information from a source pursuant to Section 114 (inspections, monitoring, and entry) of the CAA.
- 9.1.3 Notwithstanding the conditions of this permit specifying compliance practices for applicable requirements, any person (including the Permittee) may also use other credible evidence to establish compliance or noncompliance with applicable requirements.

9.2 General Obligations of Permittee

9.2.1 Duty to Comply

The Permittee must comply with all terms and conditions of this permit. Any permit noncompliance constitutes a violation of the CAA and the Act, and is grounds for any or all of the following: enforcement action, permit termination, revocation and reissuance, modification, or denial of a permit renewal application [Section 39.5(7)(o)(i) of the Act].

The Permittee shall meet applicable requirements that become effective during the permit term in a timely manner unless an alternate schedule for compliance with the applicable requirement is established.

9.2.2 Duty to Maintain Equipment

The Permittee shall maintain all equipment covered under this permit in such a manner that the performance or operation of such equipment shall not cause a violation of applicable requirements.

9.2.3 Duty to Cease Operation

No person shall cause, threaten or allow the continued operation of any emission unit during malfunction or breakdown of the emission unit or related air pollution control equipment if such operation would cause a violation of an applicable emission standard, regulatory requirement, ambient air quality standard or permit limitation unless such malfunction or breakdown is allowed by a permit condition [Section 39.5(6)(c) of the Act].

9.2.4 Disposal Operations

The source shall be operated in such a manner that the disposal of air contaminants collected by the equipment operations, or activities shall not cause a violation of the Act or regulations promulgated thereunder.

9.2.5 Duty to Pay Fees

The Permittee must pay fees to the Illinois EPA consistent with the fee schedule approved pursuant to Section 39.5(18) of the Act, and submit any information relevant thereto [Section 39.5(7)(o)(vi) of the Act]. The check should be payable to "Treasurer, State of Illinois" and sent to: Fiscal Services Section, Illinois Environmental Protection Agency, P.O. Box 19276, Springfield, Illinois 62794-9276.

9.3 Obligation to Allow Illinois EPA Surveillance

Upon presentation of proper credentials and other documents, the Permittee shall allow the Illinois EPA, or an authorized representative to perform the following [Section 39.5(7)(a) and (p)(ii) of the Act and 415 ILCS 5/4]:

- a. Enter upon the Permittee's premises where an actual or potential emission unit is located; where any regulated equipment, operation, or activity is located or where records must be kept under the conditions of this permit;
- b. Have access to and copy, at reasonable times, any records that must be kept under the conditions of this permit;
- c. Inspect during hours of operation any sources, equipment (including monitoring and air pollution control

equipment), practices, or operations regulated or required under this permit;

- d. Sample or monitor any substances or parameters at any location:
 - At reasonable times, for the purposes of assuring permit compliance; or
 - ii. As otherwise authorized by the CAA, or the Act.
- e. Obtain and remove samples of any discharge or emission of pollutants authorized by this permit; and
- f. Enter and utilize any photographic, recording, testing, monitoring, or other equipment for the purposes of preserving, testing, monitoring, or recording any activity, discharge or emission at the source authorized by this permit.
- 9.4 Obligation to Comply With Other Requirements

The issuance of this permit does not release the Permittee from applicable State and Federal laws and regulations, and applicable local ordinances addressing subjects other than air pollution control.

9.5 Liability

9.5.1 Title

This permit shall not be considered as in any manner affecting the title of the premises upon which the permitted source is located.

9.5.2 Liability of Permittee

This permit does not release the Permittee from any liability for damage to person or property caused by or resulting from the construction, maintenance, or operation of the sources.

9.5.3 Structural Stability

This permit does not take into consideration or attest to the structural stability of any unit or part of the source.

9.5.4 Illinois EPA Liability

This permit in no manner implies or suggests that the Illinois EPA (or its officers, agents or employees) assumes any liability, directly or indirectly, for any

loss due to damage, installation, maintenance, or operation of the source.

9.5.5 Property Rights

This permit does not convey any property rights of any sort, or any exclusive privilege [Section 39.5(7)(o)(iv) of the Act].

9.6 Recordkeeping

9.6.1 Control Equipment Maintenance Records

A maintenance record shall be kept on the premises for each item of air pollution control equipment. As a minimum, this record shall show the dates of performance and nature of preventative maintenance activities.

9.6.2 Records of Changes in Operation

A record shall be kept describing changes made at the source that result in emissions of a regulated air pollutant subject to an applicable requirement, but not otherwise regulated under this permit, and the emissions resulting from those changes [Section 39.5(12)(b)(iv) of the Act].

9.6.3 Retention of Records

- a. Records of all monitoring data and support information shall be retained for a period of at least 5 years from the date of the monitoring sample, measurement, report, or application. Support information includes all calibration and maintenance records, original strip-chart recordings for continuous monitoring instrumentation, and copies of all reports required by this permit [Section 39.5(7)(e)(ii) of the Act].
- b. Other records required by this permit shall be retained for a period of at least 5 years from the date of entry unless a longer period is specified by a particular permit provision.

9.7 Annual Emissions Report

The Permittee shall submit an annual emissions report to the Illinois EPA, Compliance Section no later than May 1 of the following year, as required by 35 IAC Part 254.

9.8 Requirements for Compliance Certification

Pursuant to Section 39.5(7)(p)(v) of the Act, the Permittee shall submit annual compliance certifications. The compliance

certifications shall be submitted no later than May 1 or more frequently as specified in the applicable requirements or by permit condition. The compliance certifications shall be submitted to the Air Compliance Section, Air Regional Field Office, and USEPA Region 5 - Air Branch. The addresses for the submittal of the compliance certifications are provided in Condition 8.6.4 of this permit.

- a. The certification shall include the identification of each term or condition of this permit that is the basis of the certification; the compliance status; whether compliance was continuous or intermittent; the method(s) used for determining the compliance status of the source, both currently and over the reporting period consistent with the conditions of this permit.
- b. All compliance certifications shall be submitted to USEPA Region 5 in Chicago as well as to the Illinois EPA.
- c. All compliance reports required to be submitted shall include a certification in accordance with Condition 9.9.

9.9 Certification

Any document (including reports) required to be submitted by this permit shall contain a certification by a responsible official of the Permittee that meets the requirements of Section 39.5(5) of the Act [Section 39.5(7)(p)(i) of the Act]. An example Certification by a Responsible Official is included as an attachment to this permit.

9.10 Defense to Enforcement Actions

9.10.1 Need to Halt or Reduce Activity Not a Defense

It shall not be a defense for the Permittee in an enforcement action that it would have been necessary to halt or reduce the permitted activity in order to maintain compliance with the conditions of this permit [Section 39.5(7)(o)(ii) of the Act].

9.10.2 Emergency Provision

- a. An emergency shall be an affirmative defense to an action brought for noncompliance with the technology-based emission limitations under this permit if the following conditions are met through properly signed, contemporaneous operating logs, or other relevant evidence:
 - i. An emergency occurred as provided in Section 39.5(7)(k) of the Act and the Permittee can identify the cause(s) of the emergency.

Normally, an act of God such as lightning or flood is considered an emergency;

- ii. The permitted source was at the time being properly operated;
- iii. The Permittee submitted notice of the emergency to the Illinois EPA within two working days of the time when emission limitations were exceeded due to the emergency. This notice must contain a detailed description of the emergency, any steps taken to mitigate emissions, and corrective actions taken; and
- iv. During the period of the emergency the Permittee took all reasonable steps to minimize levels of emissions that exceeded the emission limitations, standards, or regulations in this permit.
- b. This provision is in addition to any emergency or upset provision contained in any applicable requirement. This provision does not relieve a Permittee of any reporting obligations under existing federal or state laws or regulations.

9.11 Permanent Shutdown

This permit only covers emission units and control equipment while physically present at the indicated source location(s). Unless this permit specifically provides for equipment relocation, this permit is void for the operation or activity of any item of equipment on the date it is removed from the permitted location(s) or permanently shut down. This permit expires if all equipment is removed from the permitted location(s), notwithstanding the expiration date specified on this permit.

9.12 Reopening and Reissuing Permit for Cause

9.12.1 Permit Actions

This permit may be modified, reopened, and reissued, for cause pursuant to Section 39.5(15) of the Act. The filing of a request by the Permittee for a permit modification, revocation, and reissuance, or of a notification of planned changes or anticipated noncompliance does not stay any permit condition [Section 39.5(7)(o)(iii) of the Act].

9.12.2 Reopening and Revision

This permit must be reopened and revised if any of the following occur [Section 39.5(15)(a) of the Act]:

- a. Additional requirements become applicable to the equipment covered by this permit and three or more years remain before expiration of this permit;
- Additional requirements become applicable to an affected source for acid deposition under the acid rain program;
- c. The Illinois EPA or USEPA determines that this permit contains a material mistake or inaccurate statement when establishing the emission standards or limitations, or other terms or conditions of this permit; and
- d. The Illinois EPA or USEPA determines that this permit must be revised to ensure compliance with the applicable requirements of the Act.

9.12.3 Inaccurate Application

The Illinois EPA has issued this permit based upon the information submitted by the Permittee in the permit application. Any misinformation, false statement or misrepresentation in the application shall be grounds for revocation under Section 39.5(15)(b) of the Act.

9.12.4 Duty to Provide Information

The Permittee shall furnish to the Illinois EPA, within a reasonable time specified by the Illinois EPA any information that the Illinois EPA may request in writing to determine whether cause exists for modifying, revoking and reissuing, or terminating this permit, or to determine compliance with this permit. Upon request, the Permittee shall also furnish to the Illinois EPA copies of records required to be kept by this permit, or for information claimed to be confidential, the Permittee may furnish such records directly to USEPA along with a claim of confidentiality [Section 39.5(7)(o)(v) of the Act].

9.13 Severability Clause

The provisions of this permit are severable, and should any one or more be determined to be illegal or unenforceable, the validity of the other provisions shall not be affected. The rights and obligations of the Permittee shall be construed and enforced as if this permit did not contain the particular provisions held to be invalid and the applicable requirements

underlying these provisions shall remain in force [Section 39.5(7) (i) of the Act].

9.14 Permit Expiration and Renewal

The right to operate terminates on the expiration date unless the Permittee has submitted a timely and complete renewal application. For a renewal to be timely it must be submitted no later than 9 and no sooner than 12 months prior to expiration. The equipment may continue to operate during the renewal period until final action is taken by the Illinois EPA, in accordance with the original permit conditions [Section 39.5(5)(1), (n), and (o) of the Act].

10.0 ATTACHMENTS

10.1 Attachment 1 Example Certification by a Responsible Official

I certify under penalty of law that this document and all attachments were prepared under my direction or supervision in accordance with a system designed to assure that qualified personnel properly gather and evaluate the information submitted. Based on my inquiry of the person or persons directly responsible for gathering the information, the information submitted is, to the best of my knowledge and belief, true, accurate, and complete. I am aware that there are significant penalties for submitting false information, including the possibility of fine and imprisonment for knowing violations.

| Signature: | |
|-----------------|--|
| No. | |
| Name: | |
| Official Title: | |
| Telephone No.: | |
| Date Signed: | |

- 10.2 Attachment 2 Particulate Matter Emissions from Process Emission Units
 - 10.2.1 Section 212.321 Process Emission Units For Which Construction or Modification Commenced On or After April 14, 1972
 - a. Except as further provided in 35 IAC Part 212, no person shall cause or allow the emission of particulate matter into the atmosphere in any one hour period from any new process emission unit which, either alone or in combination with the emission of particulate matter from all other similar process emission units for which construction or modification commenced on or after April 14, 1972, at a source or premises, exceeds the allowable emission rates specified in subsection (c) of this Section.
 - b. Interpolated and extrapolated values of the data in subsection (c) of this Section shall be determined by using the equation:

$$E = A(P)^{B}$$

Where:

P = Process weight rate; and

E = Allowable emission rate; and,

i. Up to process weight rates of 408 Mg/hr (450 Ton/hr):

| | Metric | English |
|---|--------|---------|
| P | Mg/hr | Ton/hr |
| E | kg/hr | lbs/hr |
| A | 1.214 | 2.54 |
| В | 0.534 | 0.534 |

ii. For process weight rate greater than or equal to 408 Mg/hr (450 Ton/hr):

| | Metric | English |
|---|--------|---------|
| P | Mg/hr | Ton/hr |
| E | kg/hr | lbs/hr |
| A | 11.42 | 24.8 |
| В | 0.16 | 0.16 |

c. Limits for Process Emission Units For Which Construction of Modification Commenced On or After April 14,1972

| Metric English | | | ish |
|----------------|-------|--------|--------|
| P | E | P | E |
| Mg/hr | kg/hr | Ton/hr | lbs/hr |
| 0.05 | 0.25 | 0.05 | 0.55 |
| 0.1 | 0.29 | 0.10 | 0.77 |
| 0.2 | 0.42 | 0.20 | 1.10 |
| 0.3 | 0.64 | 0.30 | 1.35 |
| 0.4 | 0.74 | 0.40 | 1.58 |
| 0.5 | 0.84 | 0.50 | 1.75 |
| 0.7 | 1.00 | 0.75 | 2.40 |
| 0.9 | 1.15 | 1.00 | 2.60 |
| 1.8 | 1.66 | 2.00 | 3.70 |
| 2.7 | 2.1 | 3.00 | 4.60 |
| 3.6 | 2.4 | 4.00 | 5.35 |
| 4.5 | 2.7 | 5.00 | 6.00 |
| 9. | 3.9 | 10.00 | 8.70 |
| 13. | 4.8 | 15.00 | 10.80 |
| 18. | 5.7 | 20.00 | 12.50 |
| 23. | 6.5 | 25.00 | 14.00 |
| 27. | 7.1 | 30.00 | 15.60 |
| 32. | 7.7 | 35.00 | 17.00 |
| 36. | 8.2 | 40.00 | 18.20 |
| 41. | 8.8 | 45.00 | 19.20 |
| 45. | 9.3 | 50.00 | 20.50 |
| 90. | 13.4 | 100.00 | 29.50 |
| 140. | 17.0 | 150.00 | 37.00 |
| 180. | 19.4 | 200.00 | 43.00 |
| 230. | 22. | 250.00 | 48.50 |
| 270. | 24. | 300.00 | 53.00 |
| 320. | 26. | 350.00 | 58.00 |
| 360. | 28. | 400.00 | 62.00 |
| 408. | 30.1 | 450.00 | 66.00 |
| 454. | 30.4 | 500.00 | 67.00 |

Where:

P = Process weight rate in Mg/hr or Ton/hr, and E = Allowable emission rate in kg/hr or lbs/hr.

10.3 Attachment 3 Guidance on Revising This Permit

The Permittee must submit an application to the Illinois EPA using the appropriate revision classification in accordance with Sections 39.5(13) and (14) of the Act and 35 IAC 270.302. Specifically, there are currently three classifications for revisions to a CAAPP permit. These are:

- 1. Administrative Permit Amendment;
- 2. <u>Minor Permit Modification</u>; and
- 3. Significant Permit Modification.

The Permittee must determine, request, and submit the necessary information to allow the Illinois EPA to use the appropriate procedure to revise the CAAPP permit. A brief explanation of each of these classifications follows.

1. Administrative Permit Amendment

- Corrects typographical errors;
- Identifies a change in the name, address, or phone number of any person identified in the permit, or provides a similar minor administrative change at the source;
- Requires more frequent monitoring or reporting by the Permittee;
- Allows for a change in ownership or operational control of the source where no other change in the permit is necessary, provided that a written agreement containing a specific date for transfer of permit responsibility, coverage, and liability between the current and new Permittees has been submitted to the Illinois EPA. This shall be handled by completing form 272-CAAPP, REQUEST FOR OWNERSHIP CHANGE FOR CAAPP PERMIT; or
- Incorporates into the CAAPP permit a construction permit, provided the conditions of the construction permit meet the requirements for the issuance of CAAPP permits.

2. Minor Permit Modification

- Do not violate any applicable requirement;
- Do not involve significant changes to existing monitoring, reporting, or recordkeeping requirements in the permit;

- Do not require a case-by-case determination of an emission limitation or other standard, or a source-specific determination of ambient impacts, or a visibility or increment analysis;
- Do not seek to establish or change a permit term or condition for which there is no corresponding underlying requirement and which avoids an applicable requirement to which the source would otherwise be subject. Such terms and conditions include:
 - A federally enforceable emissions cap assumed to avoid classification as a modification under any provision of Title I of the CAA; and
 - An alternative emissions limit approved pursuant to regulations promulgated under Section 112(i)(5) of the CAA.
- Are not modifications under any provision of Title I of the CAA;
- Are not required to be processed as a significant permit modification; and
- Modifications involving the use of economic incentives, marketable permits, emissions trading, and other similar approaches.

An application for a minor permit modification shall include the following:

- A description of the change, the emissions resulting from the change, and any new applicable requirements that will apply if the change occurs;
- The source's suggested draft permit/conditions;
- Certification by a responsible official that the proposed modification meets the criteria for use of minor permit modification procedures and a request that such procedures be used; and
- Information as contained on form 271-CAAPP, MINOR PERMIT MODIFICATION FOR CAAPP PERMIT for the Illinois EPA to use to notify USEPA and affected States.

3. Significant Permit Modification

- Applications that do not qualify as either minor permit modifications or as administrative permit amendments;
- Applications requesting a significant change in existing monitoring permit terms or conditions;
- Applications requesting a relaxation of reporting or recordkeeping requirements; and
- Cases in which, in the judgment of the Illinois EPA, action on an application for modification would require decisions to be made on technically complex issues.

An application for a significant permit modification shall include the following:

• A detailed description of the proposed change(s), including all physical changes to equipment, changes in the method of operation, changes in emissions of each pollutant, and any new applicable requirements which will apply as a result of the proposed change. Note that the Permittee need only submit revised forms for equipment and operations that will be modified.

The Illinois EPA requires the information on the following appropriate forms to be submitted in accordance with the proper classification:

- Form 273-CAAPP, REQUEST FOR ADMINISTRATIVE PERMIT AMENDMENT FOR CAAPP PERMIT; or
- Form 271-CAAPP, MINOR PERMIT MODIFICATION FOR CAAPP PERMIT; or
- Form 200-CAAPP, APPLICATION FOR CAAPP PERMIT (for significant modification).

Application forms can be obtained from the Illinois EPA website at http://www.epa.state.il.us/air/forms.

Note that the request to revise the permit must be certified for truth, accuracy, and completeness by a responsible official.

Note that failure to submit the required information may require the Illinois EPA to deny the application. The Illinois EPA reserves the right to require that additional information be submitted as needed to evaluate or take final action on applications pursuant to Section 39.5(5)(g) of the Act and 35 IAC 270.305.



Illinois Environmental Protection Agency
Division Of Air Pollution Control -- Permit Section
P.O. Box 19506
Springfield, Illinois 62794-9506

| | | | For Illinois EPA use only | | | | |
|---|---|--------|---------------------------|------------|------------|--------|--|
| | | | ID r | ID number: | | | |
| Application For Construction | | Per | Permit number: | | | | |
| P | ermit (For CAAPP So | urces | ; Only) | | | | |
| | | | | | e receive | | |
| | orm is to be used by CAAPP source sary information and completed CA | | | | | | nstruction permit. Please attach other on project. |
| | | , | Source I | Infor | mation | า | |
| 1. | Source name: | | | | | | |
| 2. | Source street address: | | | | | | |
| 3. | City: | | | 4. | Zip code: | | |
| 5. | 5. Is the source located within city limits? | | | |] Yes 🔲 No | | |
| 6. | Township name: | 7. | County: | | | 8. | ID number: |
| | | | | | | | |
| | | | Owner I | nforr | nation | | |
| 9. | Name: | | | | | | |
| 10. | Address: | | | | | | |
| 4.4 | 0'' | 40 | <u> </u> | | | 1 4 | |
| 11. | City: | 12. | State: | | | 13 | 3. Zip code: |
| <u> </u> | | | | | | | |
| | Operato | r Info | rmation | (if d | ifferen | t from | owner) |
| 14. | Name | | | | | | |
| 15. | Address: | | | | | | |
| 16. | City: | 17. | State: | | | 18 | 3. Zip code: |
| | | | | | | | |
| Applicant Information | | | | | | | |
| 19. | Who is the applicant? ☐ Owner ☐ Operato | | | All cor | | | (check one) rator |
| 21. Attention name and/or title for written correspondence: | | | | | | | |
| 22. | Technical contact person for application: 23. Contact person's telephone number: | | | | | | |

This Agency is authorized to require and you must disclose this information under 415 ILCS 5/39. Failure to do so could result in the application being denied and penalties under 415 ILCS 5 et seq. It is not necessary to use this form in providing this information. This form has been approved by the forms management center.

| Summary Of Application Contents | | | | |
|---------------------------------|---|----------------------|--|--|
| 24. | Does the application address whether the proposed project would | ☐ Yes ☐ No | | |
| | constitute a new major source or major modification under each of the | ☐ 162 ☐ 140 | | |
| | following programs: | | | |
| | a)Non-attainment New Source Review – 35 IAC Part 203; | | | |
| | b)Prevention of Significant Deterioration (PSD) – 40 CFR 52.21; | | | |
| | c)Hazardous Air Pollutants: Regulations Governing Constructed or | | | |
| 0.5 | Reconstructed Major Sources – 40 CFR Part 63? | | | |
| 25. | Does the application identify and address all applicable emissions | ☐ Yes ☐ No | | |
| | standards, including those found in the following: | | | |
| | a)Board Emission Standards – 35 IAC Chapter I, Subtitle B;b)Federal New Source Performance Standards – 40 CFR Part 60; | | | |
| | c)Federal Standards for Hazardous Air Pollutants – 40 CFR Parts 61 and | | | |
| | 63? | | | |
| 26. | Does the application include a process flow diagram(s) showing all | ☐ Yes ☐ No | | |
| | emission units and control equipment, and their relationship, for which a | 1c3 140 | | |
| | permit is being sought? | | | |
| 27. | Does the application include a complete process description for the | ☐ Yes ☐ No | | |
| 00 | emission units and control equipment for which a permit is being sought? | | | |
| 28. | Does the application include the information as contained in completed CAAPP forms for all appropriate emission units and air pollution control | ☐ Yes ☐ No | | |
| | equipment, listing all applicable requirements and proposed exemptions | | | |
| | from otherwise applicable requirements, and identifying and describing | | | |
| | any outstanding legal actions by either the USEPA or the Illinois EPA? | | | |
| | Note: The use of "APC" application forms is not appropriate for | | | |
| | applications for CAAPP sources. CAAPP forms should be used to | | | |
| | supply information. | | | |
| 29. | If the application contains TRADE SECRET information, has such | | | |
| | information been properly marked and claimed, and have two separate | ∐ Yes ∐ No | | |
| | copies of the application suitable for public inspection and notice been | | | |
| | submitted, in accordance with applicable rules and regulations? | ☐ Not Applicable, No | | |
| | | TRADE SECRET | | |
| | | information in this | | |
| | | application | | |
| Note | 1: Answering "No" to any of the above may result in the application being | | | |
| | | | | |
| | Signature Block | | | |
| | This certification must be signed by a responsible official. Applications w certification will be returned as incomplete. | ithout a signed | | |
| 30. | I certify under penalty of law that, based on information and belief formed | after reasonable | | |
| 00. | inquiry, the statements and information contained in this application are to | | | |
| | complete. | ao, accarato ana | | |
| | Authorized Signature: | | | |
| | 1 | | | |
| | · | | | |
| | AUTHORIZED SIGNATURE TITLE OF | SIGNATORY | | |
| | | | | |
| 1 | / | 1 | | |

Note 2: An operating permit for the construction/modification permitted in a construction permit must be obtained by applying for the appropriate revision to the source's CAAPP permit, if necessary.

TYPED OR PRINTED NAME OF SIGNATORY

DATE

10.5 Attachment 5 Guidance on Renewing This Permit

Timeliness - Pursuant to Section 39.5(5)(n) of the Act and 35 IAC 270.301(d), a source must submit to the Illinois EPA a complete CAAPP application for the renewal of a CAAPP permit not later than 9 months before the date of permit expiration of the existing CAAPP permit in order for the submittal to be deemed timely. Note that the Illinois EPA typically sends out renewal notices approximately 18 months prior to the expiration of the CAAPP permit.

The CAAPP application must provide all of the following information in order for the renewal CAAPP application to be deemed complete by the Illinois EPA:

- A completed renewal application form 200-CAAPP, APPLICATION FOR CAAPP PERMIT.
- 2. A completed compliance plan form 293-CAAPP, COMPLIANCE PLAN/SCHEDULE OF COMPLIANCE FOR CAAPP PERMIT.
- 3. A completed compliance certification form 296-CAAPP, COMPLIANCE CERTIFICATION, signed by the responsible official.
- 4. Any applicable requirements that became effective during the term of the permit and that were not included in the permit as a reopening or permit revision.
- 5. If this is the first time this permit is being renewed and this source has not yet addressed CAM, the application should contain the information on form 464-CAAPP, COMPLIANCE ASSURANCE MONITORING (CAM) PLAN.
- 6. Information addressing any outstanding transfer agreement pursuant to the ERMS.
- 7. a. If operations of an emission unit or group of emission units remain unchanged and are accurately depicted in previous submittals, the application may contain a letter signed by a responsible official that requests incorporation by reference of existing information previously submitted and on file with the Illinois EPA. This letter must also include a statement that information incorporated by reference is also being certified for truth and accuracy by the responsible official's signing of the form 200-CAAPP, APPLICATION FOR CAAPP PERMIT and the form 296-CAAPP, COMPLIANCE CERTIFICATION. The boxes should be marked yes on form 200-CAAPP, APPLICATION FOR CAAPP PERMIT,

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- b. If portions of current operations are not as described in previous submittals, then in addition to the information above for operations that remain unchanged, the application must contain the necessary information on all changes, e.g., discussion of changes, new or revised CAAPP forms, and a revised fee form 292-CAAPP, FEE DETERMINATION FOR CAAPP PERMIT, if necessary.
- 8. Information about all off-permit changes that were not prohibited or addressed by the permit to occur without a permit revision and the information must be sufficient to identify all applicable requirements, including monitoring, recordkeeping, and reporting requirements, for such changes.
- 9. Information about all changes made under 40 CFR 70.4(b)(12)(i) and (ii) that require a 7-day notification prior to the change without requiring a permit revision.

The Illinois EPA will review all applications for completeness and timeliness. If the renewal application is deemed both timely and complete, the source shall continue to operate in accordance with the terms and conditions of its CAAPP permit until final action is taken on the renewal application.

Notwithstanding the completeness determination, the Illinois EPA may request additional information necessary to evaluate or take final action on the CAAPP renewal application. If such additional information affects your allowable emission limits, a revised form 292-CAAPP, FEE DETERMINATION FOR CAAPP PERMIT must be submitted with the requested information. The failure to submit to the Illinois EPA the requested information within the time frame specified by the Illinois EPA, may force the Illinois EPA to deny your CAAPP renewal application pursuant to Section 39.5 of the Act.

Application forms may be obtained from the Illinois EPA website at http://www.epa.state.il.us/air/forms.html.

If you have any questions regarding this matter, please contact a permit analyst at 217/782-2113.

Mail renewal applications to:

Illinois Environmental Protection Agency Division of Air Pollution Control

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Permit Section (MC 11)
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